



**US Army Corps
of Engineers®**
New England District

Repairs to Service Gates

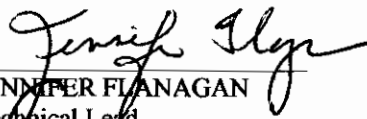
Townshend Lake
Vermont


Construction Solicitation and Specifications


June 2005

Repairs to Service Gates, Townshend Lake, VT

DESIGN AUTHENTICATION


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Chief, Engineering/Planning Branch

This project was designed for/by the New England District of the U.S. Army Corps of Engineers. The initials or signatures and registration designations of individuals appear on these project documents within the scope of their employment as required by ER1110-1-8152.

| | | | | | |
|--|--|---|--|---|------------------------------|
| SOLICITATION, OFFER, AND AWARD (Construction, Alteration, or Repair) | | 1. SOLICITATION NO. W912WJ-05-B-0009 | 2. TYPE OF SOLICITATION <input checked="" type="checkbox"/> SEALED BID (IFB) <input type="checkbox"/> NEGOTIATED (RFP) | 3. DATE ISSUED 01-Jun-2005 | PAGE OF PAGES 1 OF 22 |
| IMPORTANT - The "offer" section on the reverse must be fully completed by offeror. | | | | | |
| 4. CONTRACT NO. | | 5. REQUISITION/PURCHASE REQUEST NO. W13G86-5125-4522 | | 6. PROJECT NO. | |
| 7. ISSUED BY U S ARMY ENGR DISTRICT, NEW ENGLAND 696 VIRGINIA RD CONCORD MA 01742-2751 | | CODE W912WJ | | 8. ADDRESS OFFER TO (If Other Than Item 7) CODE See Item 7 | |
| TEL: | | FAX: 978-318-8207 | | TEL: FAX: | |
| 9. FOR INFORMATION CALL: | | A. NAME RACHAEL RAPOSA | | B. TELEPHONE NO. (Include area code) (NO COLLECT CALLS) 978-318-8249 | |
| SOLICITATION | | | | | |
| NOTE: In sealed bid solicitations "offer" and "offeror" mean "bid" and "bidder". | | | | | |
| 10. THE GOVERNMENT REQUIRES PERFORMANCE OF THE WORK DESCRIBED IN THESE DOCUMENTS (Title, identifying no., date): SPECIFICATION titled, "REPAIRS TO SERVICE GATES, TOWNSHEND LAKE, VERMONT" DATED JUNE 2005. DRAWINGS as listed in SECTION 00800, SPECIAL CONTRACT REQUIREMENTS, PARAGRAPH 1.4, "CONTRACT DRAWINGS AND SPECIFICATIONS" SECTION 00700, CONTRACT CLAUSES and SECTION 00800, SPECIAL CONTRACT REQUIREMENTS THIS PROJECT IS 100% SET-ASIDE FOR SERVICE DISABLED VETERAN OWNED BUSINESS NOTE TO BIDDERS: Please pay special attention to Section 00600, Contract Clause 52.204-8, Annual Representations and Certifications (Jan 2005). All bidders must complete the annual representations and certifications electronically via the Online Representations and Certifications Application (ORCA) website at http://orca.bpn.gov . Please ensure your firm is registered in the Contractor Central Registration (CCR) database prior to completing the ORCA requirements. The applicable NAICS Code and Size Standard for this procurement are as follows: NAICS Code: 237990 Size Standard: \$17,020,000.00 | | | | | |
| 11. The Contractor shall begin performance within <u>15</u> calendar days and complete it within <u>120</u> calendar days after receiving <input type="checkbox"/> award, <input checked="" type="checkbox"/> notice to proceed. This performance period is <input checked="" type="checkbox"/> mandatory, <input type="checkbox"/> negotiable. (See <u>Par 1.1 00800</u> .) | | | | | |
| 12 A. THE CONTRACTOR MUST FURNISH ANY REQUIRED PERFORMANCE AND PAYMENT BONDS? (If "YES," indicate within how many calendar days after award in Item 12B.) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO | | | | 12B. CALENDAR DAYS 10 | |
| 13. ADDITIONAL SOLICITATION REQUIREMENTS: A. Sealed offers in original and <u>2</u> copies to perform the work required are due at the place specified in Item 8 by <u>02:00 PM</u> (hour) local time <u>30 Jun 2005</u> (date). If this is a sealed bid solicitation, offers must be publicly opened at that time. Sealed envelopes containing offers shall be marked to show the offeror's name and address, the solicitation number, and the date and time offers are due. B. An offer guarantee <input checked="" type="checkbox"/> is, <input type="checkbox"/> is not required. C. All offers are subject to the (1) work requirements, and (2) other provisions and clauses incorporated in the solicitation in full text or by reference. D. Offers providing less than <u>60</u> calendar days for Government acceptance after the date offers are due will not be considered and will be rejected. | | | | | |

SOLICITATION, OFFER, AND AWARD (Continued)*(Construction, Alteration, or Repair)***OFFER (Must be fully completed by offeror)**

| | | |
|---|---------------|--|
| 14. NAME AND ADDRESS OF OFFEROR <i>(Include ZIP Code)</i> | | 15. TELEPHONE NO. <i>(Include area code)</i> |
| | | 16. REMITTANCE ADDRESS <i>(Include only if different than Item 14)</i> See Item 14 |
| CODE | FACILITY CODE | |

17. The offeror agrees to perform the work required at the prices specified below in strict accordance with the terms of this solicitation, if this offer is accepted by the Government in writing within _____ calendar days after the date offers are due. *(Insert any number equal to or greater than the minimum requirements stated in Item 13D. Failure to insert any number means the offeror accepts the minimum in Item 13D.)*

| | |
|---------|------------------------|
| AMOUNTS | SEE SCHEDULE OF PRICES |
|---------|------------------------|

18. The offeror agrees to furnish any required performance and payment bonds.

19. ACKNOWLEDGMENT OF AMENDMENTS*(The offeror acknowledges receipt of amendments to the solicitation -- give number and date of each)*

| | | | | | | | | | | |
|---------------|--|--|--|--|--|--|--|--|--|--|
| AMENDMENT NO. | | | | | | | | | | |
| DATE | | | | | | | | | | |

| | | |
|--|----------------|-----------------|
| 20A. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER <i>(Type or print)</i> | 20B. SIGNATURE | 20C. OFFER DATE |
|--|----------------|-----------------|

AWARD (To be completed by Government)

| | |
|---------------------|--|
| 21. ITEMS ACCEPTED: | |
|---------------------|--|

| | |
|------------|---------------------------------------|
| 22. AMOUNT | 23. ACCOUNTING AND APPROPRIATION DATA |
|------------|---------------------------------------|

| | | |
|---|------|--|
| 24. SUBMIT INVOICES TO ADDRESS SHOWN IN <i>(4 copies unless otherwise specified)</i> | ITEM | 25. OTHER THAN FULL AND OPEN COMPETITION PURSUANT TO <input type="checkbox"/> 10 U.S.C. 2304(c) <input type="checkbox"/> 41 U.S.C. 253(c) |
|---|------|--|

| | |
|---------------------------------|--|
| 26. ADMINISTERED BY CODE | 27. PAYMENT WILL BE MADE BY: CODE |
|---------------------------------|--|

CONTRACTING OFFICER WILL COMPLETE ITEM 28 OR 29 AS APPLICABLE

| | |
|--|--|
| <input type="checkbox"/> 28. NEGOTIATED AGREEMENT <i>(Contractor is required to sign this document and return _____ copies to issuing office.)</i> Contractor agrees to furnish and deliver all items or perform all work, requisitions identified on this form and any continuation sheets for the consideration stated in this contract. The rights and obligations of the parties to this contract shall be governed by (a) this contract award, (b) the solicitation, and (c) the clauses, representations, certifications, and specifications or incorporated by reference in or attached to this contract. | <input type="checkbox"/> 29. AWARD <i>(Contractor is not required to sign this document.)</i> Your offer on this solicitation, is hereby accepted as to the items listed. This award consummates the contract, which consists of (a) the Government solicitation and your offer, and (b) this contract award. No further contractual document is necessary. |
|--|--|

| | | | |
|---|-----------|---|-----------------|
| 30A. NAME AND TITLE OF CONTRACTOR OR PERSON AUTHORIZED TO SIGN <i>(Type or print)</i> | | 31A. NAME OF CONTRACTING OFFICER <i>(Type or print)</i> | |
| 30B. SIGNATURE | 30C. DATE | TEL: _____ EMAIL: _____ | |
| | | 31B. UNITED STATES OF AMERICA BY | 31C. AWARD DATE |

Section 00010 - Solicitation Contract Form

| ITEM NO | SUPPLIES/SERVICES | QUANTITY | UNIT | UNIT PRICE | AMOUNT |
|---------|----------------------------------|----------|----------|------------|---------|
| 0001 | GATE REPAIRS, TOWNSHEND LAKE, VT | 1 | Lump Sum | N/A | \$_____ |

Section 00100 - Bidding Schedule/Instructions to Bidders

CLAUSES INCORPORATED BY REFERENCE

| | | |
|-----------|--|----------|
| 52.214-3 | Amendments To Invitations For Bids | DEC 1989 |
| 52.214-4 | False Statements In Bids | APR 1984 |
| 52.214-5 | Submission Of Bids | MAR 1997 |
| 52.214-6 | Explanation To Prospective Bidders | APR 1984 |
| 52.214-7 | Late Submissions, Modifications, and Withdrawals of Bids | NOV 1999 |
| 52.214-18 | Preparation of Bids-Construction | APR 1984 |
| 52.214-19 | Contract Award-Sealed Bidding-Construction | AUG 1996 |
| 52.225-10 | Notice of Buy American Act Requirement--Construction Materials | MAY 2002 |
| 52.232-38 | Submission of Electronic Funds Transfer Information with Offer | MAY 1999 |

CLAUSES INCORPORATED BY FULL TEXT

52.003-4002 BIDS RECEIVING DESK

Bids, if submitted in person or by messenger, shall be delivered to the Bids Receiving Desk (so identified), Building 1, Contracts Branch, Contracting Division, at the above address, prior to the time fixed for opening of bids. Bidders who attend the bid opening may deliver bids directly to the Contracting Officer in the New Hampshire Conference Room.

52.003-4014 INQUIRIES

Telephone inquiries relating to this solicitation should be directed as follows:

New England District, Corps of Engineers
 Procurement of Plans and Specifications,
 Prospective Bidders List, Bid Results,
 and Award Information 978-318-8420

Technical Inquiries on Plans and
 Specifications 978-318-8249

52.003-4015 MAGNITUDE OF PROJECT

The estimated cost of the work is \$100,000.00 to \$250,000.00.

52.003-4021 PLACE OF BID OPENING

Bids will be publicly opened at the appointed time at the U. S. Army Engineer District, New England, 696 Virginia Road, Concord, MA 01742-2751, in the New Hampshire Conference Room.

52.216-1 TYPE OF CONTRACT (APR 1984)

The Government contemplates award of a firm fixed price contract resulting from this solicitation.

(End of clause)

52.233-2 SERVICE OF PROTEST (AUG 1996)

(a) Protests, as defined in section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the General Accounting Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from the Contracting Officer, U.S. Army Engineer District, New England, 696 Virginia Road, Concord, MA 01742-2751.

(b) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

(End of provision)

52.236-27 SITE VISIT (CONSTRUCTION) (FEB 1995)

(a) The clauses at 52.236-2, Differing Site Conditions, and 52.236-3, Site Investigations and Conditions Affecting the Work, will be included in any contract awarded as a result of this solicitation. Accordingly, offerors or quoters are urged and expected to inspect the site where the work will be performed.

(b) Site visits may be arranged during normal duty hours by contacting:

Name: **Jennifer Flannagan**
Address: **696 Virginia Road, Concord, MA**
Telephone: 978-318-8249

(End of provision)

52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this/these address(es):

<http://www.arnet.gov/far>

<http://farsite.hill.af.mil>

<http://www.hq.usace.army.mil/cepr/asp/library/efar.asp>

<http://acqnet.saalt.army.mil/LIBRARY>

(End of provision)

Section 00600 - Representations & Certifications

CLAUSES INCORPORATED BY FULL TEXT

52.204-3 TAXPAYER IDENTIFICATION (OCT 1998)

(a) Definitions.

Common parent, as used in this provision, means that corporate entity that owns or controls an affiliated group of corporations that files its Federal income tax returns on a consolidated basis, and of which the offeror is a member.

Taxpayer Identification Number (TIN), as used in this provision, means the number required by the Internal Revenue Service (IRS) to be used by the offeror in reporting income tax and other returns. The TIN may be either a Social Security Number or an Employer Identification Number.

(b) All offerors must submit the information required in paragraphs (d) through (f) of this provision to comply with debt collection requirements of 31 U.S.C. 7701(c) and 3325(d), reporting requirements of 26 U.S.C. 6041, 6041A, and 6050M, and implementing regulations issued by the IRS. If the resulting contract is subject to the payment reporting requirements described in Federal Acquisition Regulation (FAR) 4.904, the failure or refusal by the offeror to furnish the information may result in a 31 percent reduction of payments otherwise due under the contract.

(c) The TIN may be used by the Government to collect and report on any delinquent amounts arising out of the offeror's relationship with the Government (31 U.S.C. 7701(c)(3)). If the resulting contract is subject to the payment reporting requirements described in FAR 4.904, the TIN provided hereunder may be matched with IRS records to verify the accuracy of the offeror's TIN.

(d) Taxpayer Identification Number (TIN).

___ TIN:-----

___ TIN has been applied for.

___ TIN is not required because:

___ Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the United States and does not have an office or place of business or a fiscal paying agent in the United States;

___ Offeror is an agency or instrumentality of a foreign government;

___ Offeror is an agency or instrumentality of the Federal Government.

(e) Type of organization.

___ Sole proprietorship;

___ Partnership;

___ Corporate entity (not tax-exempt);

- ___ Corporate entity (tax-exempt);
- ___ Government entity (Federal, State, or local);
- ___ Foreign government;
- ___ International organization per 26 CFR 1.6049-4;
- ___ Other-----

(f) Common parent.

___ Offeror is not owned or controlled by a common parent as defined in paragraph (a) of this provision.

___ Name and TIN of common parent:

Name-----

TIN-----

(End of provision)

52.204-8 ANNUAL REPRESENTATIONS AND CERTIFICATIONS (JAN 2005)

(a)(1) If the clause at 52.204-7, Central Contractor Registration, is included in this solicitation, paragraph (b) of this provision applies.

(2) If the clause at 52.204-7 is not included in this solicitation, and the offeror is currently registered in CCR, and has completed the ORCA electronically, the offeror may choose to use paragraph (b) of this provision instead of completing the corresponding individual representations and certifications in the solicitation. The offeror shall indicate which option applies by checking one of the following boxes:

(___) Paragraph (b) applies.

(___) Paragraph (b) does not apply and the offeror has completed the individual representations and certifications in the solicitation.

(b) The offeror has completed the annual representations and certifications electronically via the Online Representations and Certifications Application (ORCA) website at <http://orca.bpn.gov>. After reviewing the ORCA database information, the offeror verifies by submission of the offer that the representations and certifications currently posted electronically have been entered or updated within the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer and are incorporated in this offer by reference (see FAR 4.1201); except for the changes identified below [offeror to insert changes, identifying change by clause number, title, date]. These amended representation(s) and/or certification(s) are also incorporated in this offer and are current, accurate, and complete as of the date of this offer.

| FAR Clause | Title | Date | Change |
|------------|-------|-------|--------|
| ----- | ----- | ----- | ----- |

Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications posted on ORCA.

(End of Provision)

252.209-7001 DISCLOSURE OF OWNERSHIP OR CONTROL BY THE GOVERNMENT OF A TERRORIST COUNTRY (SEP 2004)

(a) "Definitions."

As used in this provision --

(a) "Government of a terrorist country" includes the state and the government of a terrorist country, as well as any political subdivision, agency, or instrumentality thereof.

(2) "Terrorist country" means a country determined by the Secretary of State, under section 6(j)(1)(A) of the Export Administration Act of 1979 (50 U.S.C. App. 2405(j)(i)(A)), to be a country the government of which has repeatedly provided support for such acts of international terrorism. As of the date of this provision, terrorist countries subject to this provision include: Cuba, Iran, Libya, North Korea, Sudan, and Syria.

(3) "Significant interest" means --

(i) Ownership of or beneficial interest in 5 percent or more of the firm's or subsidiary's securities. Beneficial interest includes holding 5 percent or more of any class of the firm's securities in "nominee shares," "street names," or some other method of holding securities that does not disclose the beneficial owner;

(ii) Holding a management position in the firm, such as a director or officer;

(iii) Ability to control or influence the election, appointment, or tenure of directors or officers in the firm;

(iv) Ownership of 10 percent or more of the assets of a firm such as equipment, buildings, real estate, or other tangible assets of the firm; or

(v) Holding 50 percent or more of the indebtedness of a firm.

(b) "Prohibition on award."

In accordance with 10 U.S.C. 2327, no contract may be awarded to a firm or a subsidiary of a firm if the government of a terrorist country has a significant interest in the firm or subsidiary or, in the case of a subsidiary, the firm that owns the subsidiary, unless a waiver is granted by the Secretary of Defense.

(c) "Disclosure."

If the government of a terrorist country has a significant interest in the Offeror or a subsidiary of the Offeror, the Offeror shall disclose such interest in an attachment to its offer. If the Offeror is a subsidiary, it shall also disclose any significant interest the government of a terrorist country has in any firm that owns or controls the subsidiary. The disclosure shall include --

(1) Identification of each government holding a significant interest; and

(2) A description of the significant interest held by each government.

(End of provision)

252.247-7022 REPRESENTATION OF EXTENT OF TRANSPORTATION BY SEA (AUG 1992)

(a) The Offeror shall indicate by checking the appropriate blank in paragraph (b) of this provision whether transportation of supplies by sea is anticipated under the resultant contract. The term supplies is defined in the Transportation of Supplies by Sea clause of this solicitation.

(b) Representation. The Offeror represents that it:

_____ (1) Does anticipate that supplies will be transported by sea in the performance of any contract or subcontract resulting from this solicitation.

_____ (2) Does not anticipate that supplies will be transported by sea in the performance of any contract or subcontract resulting from this solicitation.

(c) Any contract resulting from this solicitation will include the Transportation of Supplies by Sea clause. If the Offeror represents that it will not use ocean transportation, the resulting contract will also include the Defense FAR Supplement clause at 252.247-7024, Notification of Transportation of Supplies by Sea.

(End of provision)

Section 00700 - Contract Clauses

CLAUSES INCORPORATED BY REFERENCE

| | | |
|-----------|--|----------|
| 52.202-1 | Definitions | JUL 2004 |
| 52.203-3 | Gratuities | APR 1984 |
| 52.203-5 | Covenant Against Contingent Fees | APR 1984 |
| 52.203-7 | Anti-Kickback Procedures | JUL 1995 |
| 52.203-8 | Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity | JAN 1997 |
| 52.203-10 | Price Or Fee Adjustment For Illegal Or Improper Activity | JAN 1997 |
| 52.203-12 | Limitation On Payments To Influence Certain Federal Transactions | JUN 2003 |
| 52.204-4 | Printed or Copied Double-Sided on Recycled Paper | AUG 2000 |
| 52.204-7 | Central Contractor Registration | OCT 2003 |
| 52.209-6 | Protecting the Government's Interest When Subcontracting With Contractors Debarred, Suspended, or Proposed for Debarment | JAN 2005 |
| 52.219-8 | Utilization of Small Business Concerns | MAY 2004 |
| 52.219-27 | Notice of Total Service-Disabled Veteran-Owned Small Business Set-Aside | MAY 2004 |
| 52.222-3 | Convict Labor | JUN 2003 |
| 52.222-4 | Contract Work Hours and Safety Standards Act - Overtime Compensation | SEP 2000 |
| 52.222-6 | Davis Bacon Act | FEB 1995 |
| 52.222-7 | Withholding of Funds | FEB 1988 |
| 52.222-8 | Payrolls and Basic Records | FEB 1988 |
| 52.222-9 | Apprentices and Trainees | FEB 1988 |
| 52.222-10 | Compliance with Copeland Act Requirements | FEB 1988 |
| 52.222-11 | Subcontracts (Labor Standards) | FEB 1988 |
| 52.222-12 | Contract Termination-Debarment | FEB 1988 |
| 52.222-13 | Compliance with Davis-Bacon and Related Act Regulations. | FEB 1988 |
| 52.222-14 | Disputes Concerning Labor Standards | FEB 1988 |
| 52.222-15 | Certification of Eligibility | FEB 1988 |
| 52.222-21 | Prohibition Of Segregated Facilities | FEB 1999 |
| 52.222-26 | Equal Opportunity | APR 2002 |
| 52.222-27 | Affirmative Action Compliance Requirements for Construction | FEB 1999 |
| 52.222-35 | Equal Opportunity For Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans | DEC 2001 |
| 52.222-36 | Affirmative Action For Workers With Disabilities | JUN 1998 |
| 52.222-37 | Employment Reports On Special Disabled Veterans, Veterans Of The Vietnam Era, and Other Eligible Veterans | DEC 2001 |
| 52.223-5 | Pollution Prevention and Right-to-Know Information | AUG 2003 |
| 52.223-6 | Drug-Free Workplace | MAY 2001 |
| 52.223-14 | Toxic Chemical Release Reporting | AUG 2003 |
| 52.225-13 | Restrictions on Certain Foreign Purchases | MAR 2005 |
| 52.226-1 | Utilization Of Indian Organizations And Indian-Owned Economic Enterprises | JUN 2000 |
| 52.227-1 | Authorization and Consent | JUL 1995 |
| 52.227-2 | Notice And Assistance Regarding Patent And Copyright Infringement | AUG 1996 |

| | | |
|--------------------|--|----------|
| 52.227-4 | Patent Indemnity-Construction Contracts | APR 1984 |
| 52.228-1 | Bid Guarantee | SEP 1996 |
| 52.228-2 | Additional Bond Security | OCT 1997 |
| 52.228-5 | Insurance - Work On A Government Installation | JAN 1997 |
| 52.228-11 | Pledges Of Assets | FEB 1992 |
| 52.228-12 | Prospective Subcontractor Requests for Bonds | OCT 1995 |
| 52.228-14 | Irrevocable Letter of Credit | DEC 1999 |
| 52.228-15 | Performance and Payment Bonds--Construction | JUL 2000 |
| 52.229-3 | Federal, State And Local Taxes | APR 2003 |
| 52.232-5 | Payments under Fixed-Price Construction Contracts | SEP 2002 |
| 52.232-17 | Interest | JUN 1996 |
| 52.232-23 Alt I | Assignment of Claims (Jan 1986) - Alternate I | APR 1984 |
| 52.232-27 | Prompt Payment for Construction Contracts | OCT 2003 |
| 52.232-33 | Payment by Electronic Funds Transfer--Central Contractor Registration | OCT 2003 |
| 52.233-1 | Disputes | JUL 2002 |
| 52.233-3 | Protest After Award | AUG 1996 |
| 52.236-2 | Differing Site Conditions | APR 1984 |
| 52.236-5 | Material and Workmanship | APR 1984 |
| 52.236-6 | Superintendence by the Contractor | APR 1984 |
| 52.236-7 | Permits and Responsibilities | NOV 1991 |
| 52.236-8 | Other Contracts | APR 1984 |
| 52.236-9 | Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements | APR 1984 |
| 52.236-10 | Operations and Storage Areas | APR 1984 |
| 52.236-11 | Use and Possession Prior to Completion | APR 1984 |
| 52.236-12 | Cleaning Up | APR 1984 |
| 52.236-13 | Accident Prevention | NOV 1991 |
| 52.236-14 | Availability and Use of Utility Services | APR 1984 |
| 52.236-15 | Schedules for Construction Contracts | APR 1984 |
| 52.236-17 | Layout of Work | APR 1984 |
| 52.236-26 | Preconstruction Conference | FEB 1995 |
| 52.242-13 | Bankruptcy | JUL 1995 |
| 52.242-14 | Suspension of Work | APR 1984 |
| 52.243-4 | Changes | AUG 1987 |
| 52.244-6 | Subcontracts for Commercial Items | DEC 2004 |
| 52.246-12 | Inspection of Construction | AUG 1996 |
| 52.247-34 | F.O.B. Destination | NOV 1991 |
| 52.248-3 | Value Engineering-Construction | FEB 2000 |
| 52.248-3 | Value Engineering-Construction | FEB 2000 |
| 52.249-2 Alt I | Termination for Convenience of the Government (Fixed- Price) (May 2004) - Alternate I | SEP 1996 |
| 52.249-10 | Default (Fixed-Price Construction) | APR 1984 |
| 52.252-2 | Clauses Incorporated By Reference | FEB 1998 |
| 52.253-1 | Computer Generated Forms | JAN 1991 |
| 252.201-7000 | Contracting Officer's Representative | DEC 1991 |
| 252.203-7001 | Prohibition On Persons Convicted of Fraud or Other Defense-Contract-Related Felonies | DEC 2004 |
| 252.204-7000 | Disclosure Of Information | DEC 1991 |
| 252.204-7003 | Control Of Government Personnel Work Product | APR 1992 |
| 252.204-7004 Alt A | Central Contractor Registration (52.204-7) Alternate A | NOV 2003 |
| 252.209-7004 | Subcontracting With Firms That Are Owned or Controlled By The Government of a Terrorist Country | MAR 1998 |

| | | |
|--------------|--|----------|
| 252.223-7004 | Drug Free Work Force | SEP 1988 |
| 252.223-7006 | Prohibition On Storage And Disposal Of Toxic And Hazardous Materials | APR 1993 |
| 252.225-7012 | Preference For Certain Domestic Commodities | JUN 2004 |
| 252.225-7031 | Secondary Arab Boycott Of Israel | APR 2003 |
| 252.227-7033 | Rights in Shop Drawings | APR 1966 |
| 252.236-7000 | Modification Proposals-Price Breakdown | DEC 1991 |
| 252.243-7001 | Pricing Of Contract Modifications | DEC 1991 |
| 252.243-7002 | Requests for Equitable Adjustment | MAR 1998 |
| 252.247-7023 | Transportation of Supplies by Sea | MAY 2002 |
| 252.247-7024 | Notification Of Transportation Of Supplies By Sea | MAR 2000 |

CLAUSES INCORPORATED BY FULL TEXT

52.204-9002 REPORTING OF CONTRACTOR MANPOWER DATA ELEMENTS

(a) Scope. The following sets forth contractual requirements for reporting of contractor labor work year equivalents (also called Contractor Man-year Equivalents (CMEs)) in support of the Army, pursuant to 10 U.S.C. 129a, 10 U.S.C. 2461(g), Section 343 of P.L. 106-65, and 32 CFR 668. Reporting shall be accomplished electronically by direct contractor submission to the secure Army Web Site:

<https://contractormanpower.us.army.mil>. Information on the background, purposes, and significance of this reporting requirement, and the 32 CFR 668 Final Rule as published in the Federal Register, can be found at this Web Site. In addition, a Help Desk function, detailed instructions on what and how to report, FAQs, and a site demonstration are available. The Army's objective is to collect as much significant CME data as possible to allow accurate reporting to Congress and for effective Army planning. The reporting data elements should not be viewed as an "all or nothing" requirement. Even partial reporting, e.g., direct labor hours, appropriation data, place of performance, Army customer, etc., will be helpful.

(b) Applicability. This reporting requirement applies to services covered by Federal Supply Class or Service codes for "Research and Development," and "Other Services and Construction." Report submissions shall not contain classified information. (Also see "Exemptions" at (d) below.)

(c) Requirements. The contractor is required to report the following contractor manpower information, associated with performance of this contract action in support of Army requirements, for all covered contracts, to the Office, Assistant Secretary of the Army (Manpower and Reserve Affairs) (ASA(M&RA)), using the secure Army data collection web-site at <https://contractormanpower.us.army.mil>. (Other information requirements associated with the manpower data collection (contract and task or delivery order numbers; appropriation data and amounts; total estimated value of contract; federal supply class or service code; major Army organizational element receiving or reviewing work; beginning and ending data for reporting period; place of performance; name, address, and point of contact for contractor; etc.) are specified and explained at the web site.)

(1) Labor Hours. Composite direct labor hours, and the value of those indirect labor hours plus compensation related costs for direct labor hours ordinarily included in the indirect pools¹.

(2) Rates. Alternatively, contractors may report two distinct, relevant (annualized) composite or average indirect labor rates in lieu of raw indirect labor hours and the value of those indirect hours. Such rates shall be annualized average estimates for the reporting contractor and need not be developed for each reporting period. Either method chosen should be consistently reported.

¹ Compensation costs are defined in the reporting instructions at the Army Web Site.

(d) Exemption(s). If the contractor is unable to comply with these reporting requirements without creating a whole new cost allocation system or system of records (such as a payroll accounting system), or due to similar insurmountable practical or economic reasons, the contractor may claim an exemption to at least a portion of the reporting requirement by certifying in writing to the contracting officer the clear underlying reason(s) for exemption from the specified report data element(s), and further certifying that they do not otherwise have to provide the exempted information, in any form, to the United States Government. The "self-exemption" will apply to all contract actions involving the contractor and will be reviewed and approved by the Deputy Assistant Secretary of the Army (Procurement), in coordination with the Deputy Assistant Secretary of the Army (Force Management and Resources), whose decision is final in this matter.

(e) Uses and Safeguarding of Information. The information submitted will be treated as contractor proprietary when associated with a contractor name of contract number.

(f) Subcontract Data. The contractor shall ensure that all reportable subcontract data is timely reported to the data collection web site (citing this contract/order number). At the discretion of the prime contractor, this reporting may be done directly by subcontractors to the data collection site; or by the prime contractor after consolidating and rationalizing all significant data from their subcontractors.

(g) Report schedule. The contractor is required to report the required information to the ASA(M&RA) data collection web site generally contemporaneous with submission of a request for payment (for example, voucher, invoice, or request for progress payment), but not less frequently than quarterly, retroactive to October 1, 1999, or the start of the contract/order, whichever is later. Deviation from this schedule requires approval of the contracting officer.

(h) Reporting Flexibility. Contractors are encouraged to communicate with the Help Desk identified at the data collection web site to resolve reporting difficulties. The web site reporting pages include a "Remarks" field to accommodate non-standard data entries if needed to facilitate simplified reporting and to minimize reporting burdens arising out of unique circumstances. Changes to facilitate reporting may be authorized by the contracting officer or the Help Desk (under HQDA policy direction and oversight).

52.222-23 NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY FOR CONSTRUCTION (FEB 1999)

(a) The offeror's attention is called to the Equal Opportunity clause and the Affirmative Action Compliance Requirements for Construction clause of this solicitation.

(b) The goals for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

| Goals for minority participation for each trade | Goals for female participation for each trade |
|---|---|
| 0.8% | 6.9% |

These goals are applicable to all the Contractor's construction work performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, the Contractor shall apply the goals established for the geographical area where the work is actually performed. Goals are published periodically in the Federal Register in notice form, and these notices may be obtained from any Office of Federal Contract Compliance Programs office.

(c) The Contractor's compliance with Executive Order 11246, as amended, and the regulations in 41 CFR 60-4 shall be based on (1) its implementation of the Equal Opportunity clause, (2) specific affirmative action obligations required by the clause entitled "Affirmative Action Compliance Requirements for Construction," and (3) its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade. The Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor, or from project to project, for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, Executive Order 11246, as amended, and the regulations in 41 CFR 60-4. Compliance with the goals will be measured against the total work hours performed.

(d) The Contractor shall provide written notification to the Deputy Assistant Secretary for Federal Contract Compliance, U.S. Department of Labor, within 10 working days following award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the --

- (1) Name, address, and telephone number of the subcontractor;
- (2) Employer's identification number of the subcontractor;
- (3) Estimated dollar amount of the subcontract;
- (4) Estimated starting and completion dates of the subcontract; and
- (5) Geographical area in which the subcontract is to be performed.

(e) As used in this Notice, and in any contract resulting from this solicitation, the "covered area" is **Townshend Lake, Vermont**

(End of provision)

52.225-9 BUY AMERICAN ACT—CONSTRUCTION MATERIALS (JAN 2005)

(a) Definitions. As used in this clause--

Component means an article, material, or supply incorporated directly into a construction material.

Construction material means an article, material, or supply brought to the construction site by the Contractor or a subcontractor for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site. Materials purchased directly by the Government are supplies, not construction material.

Cost of components means--

- (1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the construction material (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or

(2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the construction material.

Domestic construction material means--

(1) An unmanufactured construction material mined or produced in the United States; or

(2) A construction material manufactured in the United States, if the cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind for which nonavailability determinations have been made are treated as domestic.

Foreign construction material means a construction material other than a domestic construction material.

United States means the 50 States, the District of Columbia, and outlying areas.

(b) Domestic preference. (1) This clause implements the Buy American Act (41 U.S.C. 10a-10d) by providing a preference for domestic construction material. The Contractor shall use only domestic construction material in performing this contract, except as provided in paragraphs (b)(2) and (b)(3) of this clause.

(2) This requirement does not apply to the construction material or components listed by the Government as follows: [Contracting Officer to list applicable excepted materials or indicate "none"]

(3) The Contracting Officer may add other foreign construction material to the list in paragraph (b)(2) of this clause if the Government determines that

(i) The cost of domestic construction material would be unreasonable. The cost of a particular domestic construction material subject to the requirements of the Buy American Act is unreasonable when the cost of such material exceeds the cost of foreign material by more than 6 percent;

(ii) The application of the restriction of the Buy American Act to a particular construction material would be impracticable or inconsistent with the public interest; or

(iii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.

(c) Request for determination of inapplicability of the Buy American Act. (1)(i) Any Contractor request to use foreign construction material in accordance with paragraph (b)(3) of this clause shall include adequate information for Government evaluation of the request, including--

(A) A description of the foreign and domestic construction materials;

(B) Unit of measure;

(C) Quantity;

(D) Price;

(E) Time of delivery or availability;

(F) Location of the construction project;

(G) Name and address of the proposed supplier; and

(H) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph (b)(3) of this clause.

(ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (d) of this clause.

(iii) The price of construction material shall include all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued).

(iv) Any Contractor request for a determination submitted after contract award shall explain why the Contractor could not reasonably foresee the need for such determination and could not have requested the determination before contract award. If the Contractor does not submit a satisfactory explanation, the Contracting Officer need not make a determination.

(2) If the Government determines after contract award that an exception to the Buy American Act applies and the Contracting Officer and the Contractor negotiate adequate consideration, the Contracting Officer will modify the contract to allow use of the foreign construction material. However, when the basis for the exception is the unreasonable price of a domestic construction material, adequate consideration is not less than the differential established in paragraph (b)(3)(i) of this clause.

(3) Unless the Government determines that an exception to the Buy American Act applies, use of foreign construction material is noncompliant with the Buy American Act.

(d) Data. To permit evaluation of requests under paragraph (c) of this clause based on unreasonable cost, the Contractor shall include the following information and any applicable supporting data based on the survey of suppliers:

Foreign and Domestic Construction Materials Price Comparison

| Construction material description | Unit of measure | Quantity | Price (dollars)\1\ |
|-----------------------------------|-----------------|----------|--------------------|
| Item 1 | | | |
| Foreign construction material.... | | | |
| Domestic construction material... | | | |
| Item 2 | | | |
| Foreign construction material.... | | | |
| Domestic construction material... | | | |

Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued).

List name, address, telephone number, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.

Include other applicable supporting information.

(End of clause)

(a) This clause does not apply to terminations. See 52.249-5000, Basis for Settlement of Proposals and FAR Part 49.

(b) Allowable cost for construction and marine plant and equipment in sound workable condition owned or controlled and furnished by a contractor or subcontractor at any tier shall be based on actual cost data for each piece of equipment or groups of similar serial and series for which the Government can determine both ownership and operating costs from the contractor's accounting records. When both ownership and operating costs cannot be determined for any piece of equipment or groups of similar serial or series equipment from the contractor's accounting records, costs for that equipment shall be based upon the applicable provisions of EP 1110-1-8, Construction Equipment Ownership and Operating Expense Schedule, Region _____. Working conditions shall be considered to be average for determining equipment rates using the schedule unless specified otherwise by the contracting officer. For equipment not included in the schedule, rates for comparable pieces of equipment may be used or a rate may be developed using the formula provided in the schedule. For forward pricing, the schedule in effect at the time of negotiations shall apply. For retroactive pricing, the schedule in effect at the time the work was performed shall apply.

(c) Equipment rental costs are allowable, subject to the provisions of FAR 31.105(d)(ii) and FAR 31.205-36. Rates for equipment rented from an organization under common control, lease-purchase arrangements, and sale-leaseback arrangements, will be determined using the schedule, except that actual rates will be used for equipment leased from an organization under common control that has an established practice of leasing the same or similar equipment to unaffiliated lessees.

(d) When actual equipment costs are proposed and the total amount of the pricing action exceeds the small purchase threshold, the contracting officer shall request the contractor to submit either certified cost or pricing data, or partial/limited data, as appropriate. The data shall be submitted on Standard Form 1411, Contract Pricing Proposal Cover Sheet.

(End of clause)

52.236-4004 INSURANCE REQUIRED

In accordance with CONTRACT CLAUSE titled "INSURANCE – WORK ON A GOVERNMENT INSTALLATION" the Contractor shall procure and maintain during the entire period of his performance under this contract the following kinds and minimum amounts of insurance:

| TYPE | AMOUNT |
|--|--|
| Workmen's Compensation and Employers' Liability Insurance The Contractor shall comply with all applicable Workmen's Compensation Statutes and shall furnish evidence of Employers' Liability Insurance. | Not less than \$100,000 |
| General Liability Insurance Bodily injury liability insurance on the comprehensive form of policy. | Minimum limits of \$500,000 per accident |
| Automobile Liability Insurance damage liability insurance on the comprehensive form of policy and shall cover the operation of all automobiles used in performance of the contract. | Minimum limits of \$200,000 per person and \$500,000 per accident \$20,000 per accident For property damage. |

52.249-5000 BASIS FOR SETTLEMENT OF PROPOSALS

Actual costs will be used to determine equipment costs for a settlement proposal submitted on the total cost basis under FAR 49.206-2(b). In evaluating a terminations settlement proposal using the total cost basis, the following principles will be applied to determine allowable equipment costs:

- (1) Actual costs for each piece of equipment, or groups of similar serial or series equipment, need not be available in the contractor's accounting records to determine total actual equipment costs.
 - (2) If equipment costs have been allocated to a contract using predetermined rates, those charges will be adjusted to actual costs.
 - (3) Recorded job costs adjusted for unallowable expenses will be used to determine equipment operating expenses.
 - (4) Ownership costs (depreciation) will be determined using the contractor's depreciation schedule (subject to the provisions of FAR 31.205-11).
 - (5) License, taxes, storage and insurance costs are normally recovered as an indirect expense and unless the contractor charges these costs directly to contracts, they will be recovered through the indirect expense rate.
- (End of Clause)

Security - Foreign National

In accordance with Engineering Regulation, ER-380-1-18, Section 4, foreign nationals who work on U.S. Army Corps of Engineers' (USACE) contracts or task orders shall be approved by Headquarters USACE Foreign Disclosure Officer or higher before beginning work on the contract/task order. This regulation includes subcontract employees. (NOTE: exception to the above requirement includes foreign nationals who perform janitorial and/or grounds maintenance services.) The contractor shall submit to the USACE New England Division - Contracts Branch, the names of all foreign nationals proposed for performance under this contract/task order, along with documentation to verify that he/she was legally admitted into the United States and has authority to work and/or go to school in the United States. Such documentation may include a U.S. Passport, Certificate of U.S. Citizenship (INS Form N-560 or N-561), Certificate of Naturalization (INS Form N-550 or N-570), foreign passport with I-551 stamp or attached INS Form I-94 indicating employment authorization, Alien Registration Receipt Card with photograph (INS Form I-151 or I-551), Temporary Resident Card (INS Form I-688), Employment Authorization Card (INS Form I-688A), Reentry Permit (INS Form I-327), Refugee Travel Document (INS Form I-571), Employment Authorization Document issued by INS which contains a photograph (INS Form I-688B).

WAGE DETERMINATION

General Decision Number VT030041 06/13/2003 VT41

Superseded General Decision No. VT020041

State: Vermont

Construction Type:
HEAVYCounty(ies):
BENNINGTON WINDHAM
RUTLAND WINDSOR

HEAVY CONSTRUCTION PROJECTS (Excluding Sewer and Water Line)

Modification Number Publication Date
0 06/13/2003COUNTY(ies):
BENNINGTON WINDHAM
RUTLAND WINDSORPLUM0104C 02/01/2002
Rates Fringes

WINDHAM COUNTY

PIPEFITTERS 25.91 11.30+A

FOOTNOTE:

A. Two paid holidays, Independence Day and Labor Day, provided
the employee has been employed seven days prior to the
holiday by the same employerPLUM0151C 07/01/2000
Rates Fringes

BENNINGTON COUNTY

PIPEFITTERS 23.70 6.46

PLUM0693A 05/01/2002
Rates Fringes
RUTLAND AND WINDSOR COUNTIES

PIPEFITTERS 21.95 8.10

SUVT2039A 11/11/1996
Rates Fringes
CARPENTERS 11.52

| | | |
|--------------|-------|-----|
| ELECTRICIANS | 12.19 | .75 |
|--------------|-------|-----|

| | | |
|----------|------|------|
| LABORERS | 8.37 | 1.26 |
|----------|------|------|

POWER EQUIPMENT OPERATORS:

| | | |
|---------|-------|--|
| Backhoe | 10.94 | |
|---------|-------|--|

TRUCK DRIVERS:

| | | |
|-------------|------|--|
| Tandem Dump | 9.00 | |
|-------------|------|--|

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

=====

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after

award only as provided in the labor standards contract clauses (29 CFR 5.5(a)(1)(ii)).

In the listing above, the "SU" designation means that rates listed under that identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division

U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the

requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

4.) All decisions by the Administrative Review Board are final.
END OF GENERAL DECISION

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REPAIRS TO SERVICE GATES, TOWNSHEND LAKE, VERMONT

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REPAIRS TO SERVICE GATES, TOWNSHEND LAKE, VERMONT

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- 1.2 LIQUIDATED DAMAGES - CONSTRUCTION (Sept 2000) FAR 52.211-12
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-- End of Document Table of Contents --

SECTION 00800

SPECIAL CONTRACT REQUIREMENTS

1.1 COMMENCEMENT, PROSECUTION AND COMPLETION OF WORK (APR 1984) FAR 52.211-10

The Contractor shall be required to--

- (1) commence work under this contract within 15 calendar days after the date the Contractor receives the notice to proceed,
- (2) prosecute the work diligently, and
- (3) complete the entire work ready for use not later than 120 calendar days after the date the Contractor receives notice to proceed. The time stated for completion shall include final cleanup of the premises. See Paragraph "Work Sequence" in Section 01110 SUMMARY OF WORK.

1.2 LIQUIDATED DAMAGES - CONSTRUCTION (Sept 2000) FAR 52.211-12

- (a) If the Contractor fails to complete the work within the time specified in the contract, the Contractor shall pay liquidated damages to the Government in the amount of \$400.00 for each calendar day of delay until the work is completed or accepted.
- (b) If the Government terminates the Contractor's right to proceed, liquidated damages will continue to accrue until the work is completed. These liquidated damages are in addition to excess costs of repurchase under the Termination clause.

1.3 TIME EXTENSIONS (Sept 2000) FAR 52.211-13

Time extensions for contract changes will depend upon the extent, if any, by which the changes cause delay in the completion of the various elements of construction. The change order granting the time extension may provide that the contract completion date will be extended only for those specific elements related to the changed work and that the remaining contract completion dates for all other portions of the work will not be altered. The change order also may provide an equitable readjustment of liquidated damages under the new completion schedule.

1.4 CONTRACT DRAWINGS AND SPECIFICATIONS (AUG 2000) DFARS 252.236-7001

- (a) The Government will provide to the Contractor, without charge, one set of contract drawings and specifications, except publications incorporated into the technical provisions by reference. The specifications and drawings will be provided to the Contractor in electronic or paper media as chosen by the Contracting Officer.
- (b) The Contractor shall-
 - (1) Check all drawings furnished immediately upon receipt;
 - (2) Compare all drawings and verify the figures before laying out the

work;

(3) Promptly notify the Contracting Officer of any discrepancies;

(4) Be responsible for any errors that might have been avoided by complying with this paragraph (b); and

(5) Reproduce and print contract drawings and specifications as needed.

(c) In general--

(1) Large-scale drawings shall govern small-scale drawings; and

(2) The Contractor shall follow figures marked on drawings in preference to scale measurements.

(d) Omissions from the drawings or specifications or the misdescription of details of work that are manifestly necessary to carry out the intent of the drawings and specifications, or that are customarily performed, shall not relieve the Contractor from performing such omitted or misdescribed details of the work. The Contractor shall perform such details as if fully and correctly set forth and described in the drawings and specifications.

(e) The work shall conform to the specifications and to the contract drawings attached at the end of the specification document.

1.5 DESIGNATED BILLING OFFICE

Reference Contract Clause titled "PROMPT PAYMENT FOR CONSTRUCTION CONTRACTS" located in SECTION 00700 CONTRACT CLAUSES. The "designated billing office" will be the Construction Area Engineer, Resident Engineer or project office where the Contracting Officer Representative for this contract is located. The Contractor will be notified of the exact location of this office at the project preconstruction conference specified in Section 01110 SUMMARY OF WORK.

1.6 TIME EXTENSIONS FOR UNUSUALLY SEVERE WEATHER (OCT 1989) ER 415-1-15

a. This provision specifies the procedure for the determination of time extensions for unusually severe weather in accordance with the CONTRACT CLAUSE entitled, "DEFAULT (FIXED PRICE CONSTRUCTION)." In order for the Contracting Officer to award a time extension under this clause, the following conditions must be satisfied.

(1) The weather experienced at the project site during the contract period must be found to be unusually severe, that is, more severe than the adverse weather anticipated for the project location during any given month.

(2) The unusually severe weather must actually cause a delay to the completion of the project. The delay must be beyond the control and without the fault or negligence of the Contractor.

b. The following schedule of monthly anticipated adverse weather delays is based on National Oceanic and Atmospheric Administration (NOAA) or similar data for the project location and will constitute the base line for monthly weather time evaluations. The Contractor's progress schedule must reflect these anticipated adverse weather delays in all weather dependent activities.

REPAIRS TO SERVICE GATES, TOWNSHEND LAKE, VERMONT

MONTHLY ANTICIPATED ADVERSE WEATHER DELAY WORK DAYS
BASED ON 5 DAY WORK WEEK

| | | | | | |
|--------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| <u>JAN</u> (11) | <u>FEB</u> (8) | <u>MAR</u> (4) | <u>APR</u> (1) | <u>MAY</u> (1) | <u>JUN</u> (1) |
| <u>JUL</u> (1) | <u>AUG</u> (1) | <u>SEP</u> (1) | <u>OCT</u> (1) | <u>NOV</u> (2) | <u>DEC</u> (9) |

c. Upon acknowledgment of the Notice to Proceed (NTP) and continuing throughout the contract, the Contractor will record on the daily CQC report, the occurrence of adverse weather and resultant impact to normally scheduled work. Actual adverse weather delay days must prevent work on critical activities for 50 percent or more of the Contractor's scheduled work day. The number of actual adverse weather delay days shall include days impacted by actual adverse weather (even if adverse weather occurred in previous month), be calculated chronologically from the first to the last day of each month, and be recorded as full days. If the number of actual adverse weather delay days exceeds the number of days anticipated in paragraph b, above, the Contracting Officer will convert any qualifying delays to calendar days, giving full consideration for equivalent fair weather work days, and issue a modification in accordance with the contract clause entitled "DEFAULT (FIXED PRICE CONSTRUCTION)".

1.7 WARRANTY OF CONSTRUCTION (MAR 1994) FAR 52.246-21 Alternate I

(a) In addition to any other warranties in this contract, the Contractor warrants, except as provided in paragraph (i) of this clause, that work performed under this contract conforms to the contract requirements and is free of any defect in equipment, material, or design furnished, or workmanship performed by the Contractor or any subcontractor or supplier at any tier.

(b) This warranty shall continue for a period of 1 year from the date of final acceptance of the work. If the Government takes possession of any part of the work before final acceptance, this warranty shall continue for a period of 1 year from the date the Government takes possession.

(c) The Contractor shall remedy at the Contractor's expense any failure to conform, or any defect. In addition, the Contractor shall remedy at the Contractor's expense any damage to Government-owned or controlled real or personal property, when that damage is the result of--

(1) The Contractor's failure to conform to contract requirements; or

(2) Any defect of equipment, material, workmanship, or design furnished.

(d) The Contractor shall restore any work damaged in fulfilling the terms and conditions of this clause. The Contractor's warranty with respect to work repaired or replaced will run for 1 year from the date of repair or replacement.

(e) The Contracting Officer shall notify the Contractor, in writing, within a reasonable time after the discovery of any failure, defect, or damage.

(f) If the Contractor fails to remedy any failure, defect, or damage within a reasonable time after receipt of notice, the Government shall have the right to replace, repair, or otherwise remedy the failure, defect, or

damage at the Contractor's expense.

(g) With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this contract, the Contractor shall--

(1) Obtain all warranties that would be given in normal commercial practice;

(2) Require all warranties to be executed, in writing, for the benefit of the Government, if directed by the Contracting Officer; and

(3) Enforce all warranties for the benefit of the Government, if directed by the Contracting Officer.

(h) In the event the Contractor's warranty under paragraph (b) of this clause has expired, the Government may bring suit at its expense to enforce a subcontractor's, manufacturer's, or supplier's warranty.

(i) Unless a defect is caused by the negligence of the Contractor or subcontractor or supplier at any tier, the Contractor shall not be liable for the repair of any defects of material or design furnished by the Government nor for the repair of any damage that results from any defect in Government-furnished material or design.

(j) This warranty shall not limit the Government's rights under the Inspection and Acceptance clause of this contract with respect to latent defects, gross mistakes, or fraud.

(k) Defects in design or manufacture of equipment specified by the Government on a 'brand name and model' basis, shall not be included in this warranty. In this event, the Contractor shall require any subcontractors, manufacturers, or suppliers thereof to execute their warranties, in writing, directly to the Government.

-- End of Section --

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PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (Not Applicable)

-- End of Section Table of Contents --

SECTION 01110

SUMMARY OF WORK

PART 1 GENERAL

1.1 WORK COVERED BY CONTRACT DOCUMENTS

The general description below is given to indicate the approximate scope of this project only. It does not limit the work required under the project drawings and specifications.

The work of this project consists of furnishing all labor, equipment, and materials to perform repairs to the three service gates at Townshend Lake Dam, Vermont. Specific work items include the replacement of a broken wire rope (cable) at Gate Number 3, the replacement of a worn wire rope at Gate Number 1, and the replacement of a worn wire rope and a broken chain at Gate Number 2. The wire ropes to be replaced, one per gate, are approximately 1,450 feet long each. The Contractor shall dispose of the existing wire ropes to be replaced off of the project site. The new wire ropes shall be of the same length as the original and made of 1-inch diameter drawn galvanized extra improved plow steel. The chain to be replaced is approximately 48 feet long. The new chain shall be of the same length and fabricated of stainless steel with 110 rollers, 110 pins, and 220 side bars. Additional work involves mechanical repairs to the hoist brake mechanism for Gate Number 3. The Contractor is required to complete the work in a specific sequence, to complete the work on one gate before beginning work on an additional gate, and to work continuously on the repairs to a specific gate until that gate is fully repaired and operational (including weekend work if necessary, but not work beyond daylight hours). Seven days notice to the Government is required prior to beginning work at the site.

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Progress Schedule; G, RO.

In accordance with the contract clauses, the Contractor shall, within five (5) days after receipt of notice to proceed or as otherwise determined by the Contracting Officer, submit for approval a practicable progress schedule. When changes are authorized that result in contract time extensions, Contractor shall submit a modified chart for approval by the Contracting Officer.

REPAIRS TO SERVICE GATES, TOWNSHEND LAKE, VERMONT

1.3 PROJECT/SITE CONDITIONS

1.3.1 Site Security

The Contractor shall report any vandalism, suspicious activities or devices to the Project Manager or local police as soon as possible. The Project Manager will notify the Contractor of any heightened security measures and will expect vigilant monitoring of equipment, grounds and security fencing while working. At a heightened security posture, there may be work areas that are restricted. The Project Manager will notify the contractor of these restricted areas, and work may be delayed or restricted or will be performed in these areas under the direct supervision of U.S. Army Corps of Engineers personnel.

1.4 WORK SEQUENCE AND SCHEDULING

1.4.1 Hours of Operations

Normal work hours are from 7:00 a.m. through 3:30 p.m., Monday through Friday. The Contractor will be permitted to work on Saturday, Sunday or legal holidays, and during all daylight hours, to complete the work on a particular gate if the work for that gate was started at a time which prevented the completion of the work during a Monday through Friday period using normal work hours. The exclusion of work on Saturday, Sunday and legal holidays, and normal work hours, have been used in computing the performance time of this contract. The following legal holidays are observed:

January 1st
Third Monday in January
Third Monday in February
Last Monday of May
July 4th
1st Monday of September
2nd Monday of October
11th of November
Fourth Thursday of November
25th of December

When one of the above designated legal holidays falls on a Sunday, the following Monday will be observed as a legal holiday. When a legal holiday falls on a Saturday, the preceding Friday is observed as a holiday. Requests to perform work at other times shall be made in writing to the Contracting Officer.

1.4.2 Required Work Sequence

The Contractor shall complete the work of this project in the following sequence:

1. Mechanical repairs to the hoist brake mechanism at Gate Number 3.
2. Replace the broken wire rope for Gate Number 3.
3. Replace the worn wire rope for Gate Number 1.
4. Replace the worn wire rope and broken chain for Gate Number 2. The chain replacement work may be started earlier, i.e., during the wire rope replacement work for Gate Numbers 1 and 3.

Additional work requirements are as follows:

1. Field repair work for a particular gate shall not commence until all required materials are on-site and ready for installation.
2. Only one gate shall be worked on at a time (except for the chain work for Gate Number 2, as stated above).
3. Once the work on a particular gate has started, it shall be continuously worked on without interruption, for a minimum of complete eight hour work days, until completed. This may require working daylight hours in excess of the normal 7:00 a.m. through 3:30 p.m. shift, and working Saturdays, Sundays, and holidays. Work time beyond normal daylight hours will not be permitted.
4. The Contractor shall notify the Contracting Officer a minimum of seven work days in advance of commencement of work at the site, and 72 hours in advance of beginning site work for each gate.

1.4.3 Flood Control Operations

In the event that it becomes necessary to operate the reservoir for flood control purposes during the prosecution of the work, the Contractor will be given a minimum of 12 hours advance notice. Upon such notification, the Contractor shall suspend construction operations and take such other actions and perform such additional work as directed by the Contracting Officer to prepare the dam for flood control operations. In such an event, an equitable adjustment will be made in the contract price and duration.

1.4.4 Progress Schedule

The progress schedule shall be in the form of a chart graphically indicating the sequence proposed to accomplish each work feature or operation, and shall incorporate the required work sequence as stated above. The chart shall be prepared to show the starting and completion dates of all work features on a linear horizontal time scale beginning with date of Notice to Proceed and indicating calendar days to completion. Contractor shall indicate on the chart the important work features or operations that are critical to the timely overall completion of the project. Key dates for such important work features and portions of work features are milestone dates and shall be so indicated on the chart. This schedule will be the medium through which the timeliness of the Contractor's construction effort is appraised.

1.4.5 Organization at the Site

1.4.5.1 General

The Contractor shall employ ample personnel and sufficient equipment to accomplish the work of this contract in the least amount of time, within the prosecution period specified in SPECIAL CONTRACT REQUIREMENTS, Clause 1.

1.4.5.2 Rate of Progress

Should the Contractor fail to maintain a satisfactory rate of progress in accordance with the Contractor's approved progress schedule, the Contracting Officer may require that additional personnel and equipment be placed on the work and weekend and overtime work be performed, in order

that the work be brought up to schedule and maintained.

1.5 CONTRACTOR USE OF PREMISES

1.5.1 Storage Areas

See Section 01500 TEMPORARY CONSTRUCTION FACILITIES for information on storage areas available for use by the Contractor.

1.5.2 Work Limits

Work shall be restricted to the areas in the immediate vicinity of the gate components being replaced, in addition to storage areas assigned to this Contractor.

1.5.3 Contractor's Receipt of Supplies

The Contractor shall be responsible for all arrangements for the receipt of materials and supplies at the job site. Government personnel are not permitted to receive or sign for items delivered to the site.

1.5.4 Access to Work Site

Access to the project site is currently available for construction traffic.

1.6 PRECONSTRUCTION CONFERENCE

The Contracting Officer will conduct a preconstruction conference with key Contractor personnel. The purpose of the conference is to review contract requirements and to establish a working relationship between the Contractor's Staff and the Corps of Engineers personnel who will be closely associated with the project. During the conference, the Contracting Officer will inform the Contractor concerning Job Safety, Quality Control, Labor Relations, and Environmental Protection. The Contractor's Superintendent, Quality Control Representative, and Site Safety and Health Officer (SSHO) shall attend this conference. All submittals which are ready for submission prior to start of work may be brought to the conference for distribution to the participating reviewers.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (Not Applicable)

-- End of Section --

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DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01330

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 - 1.1.1 Submittal
 - 1.1.2 Submittal Descriptions (SD)
 - 1.1.3 Approving Authority
 - 1.1.4 Work
- 1.2 SUBMITTALS
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- 1.6 WITHHOLDING OF PAYMENT
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- 1.8 SUBMITTAL REGISTER
- 1.9 SCHEDULING
- 1.10 TRANSMITTAL FORM (ENG FORM 4025)
- 1.11 SUBMITTAL PROCEDURES
 - 1.11.1 Procedures
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 - 1.11.3 Deviations
- 1.12 CONTROL OF SUBMITTALS
- 1.13 GOVERNMENT APPROVED SUBMITTALS
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- 1.15 STAMPS

PART 2 MATERIALS (Not Used)

PART 3 PROCEDURES (Not Used)

-- End of Section Table of Contents --

SECTION 01330

SUBMITTAL PROCEDURES

PART 1 GENERAL

1.1 DEFINITIONS

1.1.1 Submittal

Contract Clauses "FAR 52.236-5, Material and Workmanship," paragraph (b) and "FAR 52.236-21, Specifications and Drawings for Construction," paragraphs (d), (e), and (f) apply to all "submittals".

1.1.2 Submittal Descriptions (SD)

Submittals requirements are specified in the technical sections. Submittals are identified by SD numbers and titles as follows.

SD-01 Preconstruction Submittals

- Certificates of insurance.
- Surety bonds.
- List of proposed subcontractors.
- List of proposed products.
- Construction Progress Schedule.
- Submittal register.
- Schedule of prices.
- Health and safety plan.
- Work plan.
- Quality control plan.
- Environmental protection plan.

SD-02 Shop Drawings

Drawings, diagrams and schedules specifically prepared to illustrate some portion of the work.

Diagrams and instructions from a manufacturer or fabricator for use in producing the product and as aids to the Contractor for integrating the product or system into the project.

Drawings prepared by or for the Contractor to show how multiple systems and interdisciplinary work will be coordinated.

SD-03 Product Data

Catalog cuts, illustrations, schedules, diagrams, performance charts, instructions and brochures illustrating size, physical appearance and other characteristics of materials or equipment for some portion of the work.

Samples of warranty language when the contract requires extended product warranties.

SD-06 Test Reports

Report signed by authorized official of testing laboratory that a material, product or system identical to the material, product or system to be provided has been tested in accord with specified requirements. (Testing must have been within three years of date of contract award for the project.)

Report which includes findings of a test required to be performed by the Contractor on an actual portion of the work or prototype prepared for the project before shipment to job site.

Report which includes finding of a test made at the job site or on sample taken from the job site, on portion of work during or after installation.

Investigation reports.

Daily checklists.

Final acceptance test and operational test procedure.

SD-07 Certificates

Statements printed on the manufacturer's letterhead and signed by responsible officials of manufacturer of product, system or material attesting that product, system or material meets specification requirements. Must be dated after award of project contract and clearly name the project.

Document required of Contractor, or of a supplier, installer or subcontractor through Contractor, the purpose of which is to further quality of orderly progression of a portion of the work by documenting procedures, acceptability of methods or personnel qualifications.

Confined space entry permits.

Text of posted operating instructions.

1.1.3 Approving Authority

Office authorized to approve submittal.

1.1.4 Work

As used in this section, on- and off-site construction required by contract documents, including labor necessary to produce submittals, construction, materials, products, equipment, and systems incorporated or to be incorporated in such construction.

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only or as otherwise designated. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Submittal register; G, RO.

1.3 SUBMITTAL CLASSIFICATION

Submittals are classified as follows:

1.3.1 Government Approved

Government approval is required for extensions of design, critical materials, deviations, equipment whose compatibility with the entire system must be checked, and other items as designated by the Contracting Officer. Within the terms of the Contract Clause entitled "Specifications and Drawings for Construction", they are considered to be "shop drawings".

1.3.2 Information Only

All submittals not requiring Government approval will be for information only. They are not considered to be "shop drawings" within the terms of the Contract Clause referred to above.

1.4 APPROVED SUBMITTALS

The Contracting Officer's approval of submittals shall not be construed as a complete check, but will indicate only that the general method of construction, materials, detailing and other information are satisfactory. Approval will not relieve the Contractor of the responsibility for any error which may exist, as the Contractor under the Contractor Quality Control (CQC) requirements of this contract is responsible for design, dimensions, all design extensions, such as the design of adequate connections and details, etc., and the satisfactory construction of all work. After submittals have been approved by the Contracting Officer, no resubmittal for the purpose of substituting materials or equipment will be considered unless accompanied by an explanation of why a substitution is necessary.

1.5 DISAPPROVED SUBMITTALS

The Contractor shall make all corrections required by the Contracting Officer and promptly furnish a corrected submittal in the form and number of copies specified for the initial submittal. If the Contractor considers any correction indicated on the submittals to constitute a change to the contract, a notice in accordance with the Contract Clause "Changes" shall be given promptly to the Contracting Officer.

1.6 WITHHOLDING OF PAYMENT

Payment for materials incorporated in the work will not be made if required approvals have not been obtained.

1.7 GENERAL

The Contractor shall make submittals as required by the specifications. The Contracting Officer may request submittals in addition to those specified when deemed necessary to adequately describe the work covered in the respective sections. Units of weights and measures used on all submittals shall be the same as those used in the contract drawings. Each submittal shall be complete and in sufficient detail to allow ready

determination of compliance with contract requirements. Prior to submittal, all items shall be checked and approved by the Contractor's Quality Control (CQC) System Manager and each item shall be stamped, signed, and dated by the CQC System Manager indicating action taken. Proposed deviations from the contract requirements shall be clearly identified. Submittals shall include items such as: Contractor's, manufacturer's, or fabricator's drawings; descriptive literature including (but not limited to) catalog cuts, diagrams, operating charts or curves; test reports; test cylinders; samples; O&M manuals (including parts list); certifications; warranties; and other such required submittals. Submittals requiring Government approval shall be scheduled and made prior to the acquisition of the material or equipment covered thereby. Samples remaining upon completion of the work shall be picked up and disposed of in accordance with manufacturer's Material Safety Data Sheets (MSDS) and in compliance with existing laws and regulations.

1.8 SUBMITTAL REGISTER

At the end of this section is a submittal register showing items of equipment and materials for which submittals are required by the specifications; this list may not be all inclusive and additional submittals may be required. The Government will provide the initial submittal register in electronic format. Thereafter, the Contractor shall maintain a complete list of all submittals, including completion of all data columns. Dates on which submittals are received and returned by the Government will be included in its export file to the Contractor. The Contractor shall track all submittals.

1.9 SCHEDULING

Submittals covering component items forming a system or items that are interrelated shall be scheduled to be coordinated and submitted concurrently. Certifications to be submitted with the pertinent drawings shall be so scheduled. Adequate time (a minimum of 14 calendar days exclusive of mailing time) shall be allowed and shown on the register for review and approval. No delay damages or time extensions will be allowed for time lost in late submittals.

1.10 TRANSMITTAL FORM (ENG FORM 4025)

The sample transmittal form (ENG Form 4025) attached to this section shall be used for submitting both Government approved and information only submittals in accordance with the instructions on the reverse side of the form. These forms are included in the QCS software that the Contractor is required to use for this contract. This form shall be properly completed by filling out all the heading blank spaces and identifying each item submitted. Special care shall be exercised to ensure proper listing of the specification paragraph and/or sheet number of the contract drawings pertinent to the data submitted for each item.

1.11 SUBMITTAL PROCEDURES

Submittals shall be made as follows:

1.11.1 Procedures

Submit seven (7) copies of each submittal item with an attached ENG FORM 4025 Transmittal Form.

REPAIRS TO SERVICE GATES, TOWNSHEND LAKE, VERMONT

a. Construction/Operations Division {"AO" (Area Office), "RO" (Resident Office), or "PO" (Project Office) Reviewer}: An "AO", "RO", or "PO" in column "f" indicates that the submittal review action is by New England District Construction/Operations Division. Send all such submittals to the project Resident or Area Engineer, as applicable.

b. Engineering/Planning Division {"DO" (District Office) Reviewer}: A "DO" on the attached submittal register, column "f" indicates that the submittal review action is by the New England District, Engineering/Planning Division, or other organization in the District Office. Send all such submittals to the U.S. Army Corps of Engineers, New England District 696 Virginia Road, Concord, Massachusetts 01742-2751.

c. Architect-Engineer Firm {"AE" reviewer}: An "AE" on the attached submittal register, column "f" indicates that the submittal review action is by the Architect-Engineer firm associated with the project.

1.11.2 Information on Submittal Status

All Contractor requests for current status of submittal reviews shall be made through the Resident Engineer.

1.11.3 Deviations

For submittals which include proposed deviations requested by the Contractor, the column "variation" of ENG Form 4025 shall be checked. The Contractor shall set forth in writing the reason for any deviations and annotate such deviations on the submittal. The Government reserves the right to rescind inadvertent approval of submittals containing unnoted deviations.

1.12 CONTROL OF SUBMITTALS

The Contractor shall carefully control his procurement operations to ensure that each individual submittal is made on or before the Contractor scheduled submittal date shown on the approved "Submittal Register".

1.13 GOVERNMENT APPROVED SUBMITTALS

Upon completion of review of submittals requiring Government approval, the submittals will be identified as having received approval by being so stamped and dated. Five copies of the submittal will be retained by the Contracting Officer and two copies of the submittal will be returned to the Contractor.

1.14 INFORMATION ONLY SUBMITTALS

Normally, submittals designated as "For Information Only" will not be returned. Approval of the Contracting Officer is not required on information only submittals. The Government reserves the right to require the Contractor to resubmit any item found not to comply with the contract. This does not relieve the Contractor from the obligation to furnish material conforming to the plans and specifications; will not prevent the Contracting Officer from requiring removal and replacement of nonconforming material incorporated in the work; and does not relieve the Contractor of the requirement to furnish samples for testing by the Government laboratory or for check testing by the Government in those instances where the technical specifications so prescribe.

REPAIRS TO SERVICE GATES, TOWNSHEND LAKE, VERMONT

1.15 STAMPS

Stamps used by the Contractor on the submittal data to certify that the submittal meets contract requirements shall be similar to the following:

| | |
|--|----------|
| CONTRACTOR | |
| (Firm Name) | |
| _____ | Approved |
| _____ Approved with corrections as noted on submittal data and/or attached sheets(s). | |
| SIGNATURE: _____ | |
| TITLE: _____ | |
| DATE: _____ | |

PART 2 MATERIALS (Not Used)

PART 3 PROCEDURES (Not Used)

-- End of Section --

SUBMITTAL REGISTER

CONTRACT NO.

| TITLE AND LOCATION REPAIRS TO SERVICE GATES, TOWNSHEND LAKE, VERMONT | | | | | | CONTRACTOR | | | | | | | | | | | |
|---|-------------------|--------------|----------------------------------|-----------|------------------------------------|-------------------------------|--------------------------|--------------------------|----------------------|----------------------|---|----------------------------------|----------------------------------|----------------|----------------------|--|---------|
| ACTIVITY NO | TRANSMITTAL NO | SPEC SECT | DESCRIPTION ITEM SUBMITTED | PARAGRAPH | GOVT CLASSIFICATION REV N | CONTRACTOR: SCHEDULE DATES | | | CONTRACTOR ACTION | | DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR | APPROVING AUTHORITY | | | | MAILED TO CONTR/ DATE RCD FRM APPR AUTH | REMARKS |
| | | | | | | SUBMIT | APPROVAL NEEDED BY | MATERIAL NEEDED BY | ACTION CODE | DATE OF ACTION | | DATE FWD TO OTHER REVIEWER | DATE RCD FROM OTH REVIEWER | ACTION CODE | DATE OF ACTION | | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) | (l) | (m) | (n) | (o) | (p) | (q) | (r) |
| | | 01110 | SD-01 Preconstruction Submittals | | | | | | | | | | | | | | |
| | | | Progress Schedule | 1.4.4 | G RO | | | | | | | | | | | | |
| | | 01330 | SD-01 Preconstruction Submittals | | | | | | | | | | | | | | |
| | | | Submittal register | | G RO | | | | | | | | | | | | |
| | | 01355 | SD-01 Preconstruction Submittals | | | | | | | | | | | | | | |
| | | | Environmental Protection Plan | 1.7 | G RO | | | | | | | | | | | | |
| | | 01525 | SD-01 Preconstruction Submittals | | | | | | | | | | | | | | |
| | | | Accident Prevention Plan (APP) | 1.8 | G RO | | | | | | | | | | | | |
| | | | Activity Hazard Analysis (AHA) | 1.9 | G RO | | | | | | | | | | | | |
| | | | Crane Critical Lift Plan | 1.8.1 | G RO | | | | | | | | | | | | |
| | | | SD-06 Test Reports | | | | | | | | | | | | | | |
| | | | Accident Reports | 1.13.1 | | | | | | | | | | | | | |
| | | | Monthly Exposure Reports | 1.13.3 | | | | | | | | | | | | | |
| | | | Regulatory Citations and | 1.13.4 | | | | | | | | | | | | | |
| | | | Violations | | | | | | | | | | | | | | |
| | | | Crane Reports | 1.13.5 | | | | | | | | | | | | | |
| | | 15001 | SD-01 Preconstruction Submittals | | | | | | | | | | | | | | |
| | | | Work Plan | | G DO | | | | | | | | | | | | |
| | | | SD-03 Product Data | | | | | | | | | | | | | | |
| | | | Wire Rope | | G DO | | | | | | | | | | | | |
| | | | SD-07 Certificates | | | | | | | | | | | | | | |
| | | | Certificate of Installation | | | | | | | | | | | | | | |
| | | 15002 | SD-01 Preconstruction Submittals | | | | | | | | | | | | | | |
| | | | Work Plan | | G DO | | | | | | | | | | | | |
| | | | SD-02 Shop Drawings | | | | | | | | | | | | | | |
| | | | Roller Chain | 2.1 | G DO | | | | | | | | | | | | |

| | |
|---|---------------------|
| <p align="center">SUBMITTAL REGISTER</p> | <p>CONTRACT NO.</p> |
|---|---------------------|

| |
|--------------|
| CONTRACT NO. |
|--------------|

TITLE AND LOCATION
REPAIRS TO SERVICE GATES, TOWNSHEND LAKE, VERMONT

| |
|------------|
| CONTRACTOR |
|------------|

[illegible]

INSTRUCTIONS

1. Section I will be initiated by the Contractor in the required number of copies.
2. Each transmittal shall be numbered consecutively in the space provided for "Transmittal No.". This number, in addition to the contract number, will form a serial number for identifying each submittal. For new submittals or resubmittals mark the appropriate box; on resubmittals, insert transmittal number of last submission as well as the new submittal number.
3. The "Item No." will be the same "Item No." as indicated on ENG FORM 4288-R for each entry on this form.
4. Submittals requiring expeditious handling will be submitted on a separate form.
5. Separate transmittal form will be used for submittals under separate sections of the specifications.
6. A check shall be placed in the "Variation" column when a submittal is not in accordance with the plans and specifications--also, a written statement to that effect shall be included in the space provided for "Remarks".
7. Form is self-transmittal, letter of transmittal is not required.
8. When a sample of material or Manufacturer's Certificate of Compliance is transmitted, indicate "Sample" or "Certificate" in column c, Section I.
9. U.S. Army Corps of Engineers approving authority will assign action codes as indicated below in space provided in Section I, column i to each item submitted. In addition they will ensure enclosures are indicated and attached to the form prior to return to the contractor. The Contractor will assign action codes as indicated below in Section I, column g, to each item submitted.

THE FOLLOWING ACTION CODES ARE GIVEN TO ITEMS SUBMITTED

- | | |
|---|---|
| A -- Approved as submitted. | E -- Disapproved (See attached). |
| B -- Approved, except as noted on drawings. | F -- Receipt acknowledged. |
| C -- Approved, except as noted on drawings. Refer to attached sheet resubmission required. | FX -- Receipt acknowledged, does not comply as noted with contract requirements. |
| D -- Will be returned by separate correspondence. | G -- Other (<i>Specify</i>) |

10. Approval of items does not relieve the contractor from complying with all the requirements of the contract plans and specifications.

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SECTION 01355

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 - 1.2.2 Environmental Protection
 - 1.2.3 Contractor Generated Hazardous Waste
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-- End of Section Table of Contents --

SECTION 01355

ENVIRONMENTAL PROTECTION

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

| | |
|------------------|---|
| 33 CFR 328 | Definitions |
| 40 CFR 68 | Chemical Accident Prevention Provisions |
| 40 CFR 261 | Identification and Listing of Hazardous Waste |
| 40 CFR 262 | Standards Applicable to Generators of Hazardous Waste |
| 40 CFR 279 | Standards for the Management of Used Oil |
| 40 CFR 302 | Designation, Reportable Quantities, and Notification |
| 40 CFR 355 | Emergency Planning and Notification |
| 49 CFR 171 - 178 | Hazardous Materials Regulations |

U.S. ARMY CORPS OF ENGINEERS (USACE)

| | |
|------------|--|
| EM 385-1-1 | (2003) Safety and Health Requirements Manual |
|------------|--|

1.2 DEFINITIONS

1.2.1 Environmental Pollution and Damage

Environmental pollution and damage is the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to human life; affect other species of importance to humankind; or degrade the environment aesthetically, culturally and/or historically.

1.2.2 Environmental Protection

Environmental protection is the prevention/control of pollution and habitat disruption that may occur to the environment during construction. The control of environmental pollution and damage requires consideration of

REPAIRS TO SERVICE GATES, TOWNSHEND LAKE, VERMONT

land, water, and air; biological and cultural resources; and includes management of visual aesthetics; noise; solid, chemical, gaseous, and liquid waste; radiant energy and radioactive material as well as other pollutants.

1.2.3 Contractor Generated Hazardous Waste

Contractor generated hazardous waste means materials that, if abandoned or disposed of, may meet the definition of a hazardous waste. These waste streams would typically consist of material brought on site by the Contractor to execute work, but are not fully consumed during the course of construction. Examples include, but are not limited to, excess paint thinners (i.e. methyl ethyl ketone, toluene etc.), waste thinners, excess paints, excess solvents, waste solvents, and excess pesticides, and contaminated pesticide equipment rinse water.

1.2.4 Waters of the United States

All waters which are under the jurisdiction of the Clean Water Act, as defined in 33 CFR 328.

1.3 GENERAL REQUIREMENTS

The Contractor shall minimize environmental pollution and damage that may occur as the result of construction operations. The environmental resources within the project boundaries and those affected outside the limits of permanent work shall be protected during the entire duration of this contract. The Contractor shall comply with all applicable environmental Federal, State, and local laws and regulations. The Contractor shall be responsible for any delays resulting from failure to comply with environmental laws and regulations.

1.4 SUBCONTRACTORS

The Contractor shall ensure compliance with this section by subcontractors.

1.5 PAYMENT

No separate payment will be made for work covered under this section. The Contractor shall be responsible for payment of fees associated with environmental permits, application, and/or notices obtained by the Contractor. All costs associated with this section shall be included in the contract price. The Contractor shall be responsible for payment of all fines/fees for violation or non-compliance with Federal, State, Regional and local laws and regulations.

1.6 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Environmental Protection Plan; G, RO.

The Contractor shall submit the environmental protection plan.

1.7 ENVIRONMENTAL PROTECTION PLAN

Prior to commencing construction activities or delivery of materials to the site, the Contractor shall submit an Environmental Protection Plan for review and approval by the Contracting Officer. The purpose of the Environmental Protection Plan is to present a comprehensive overview of known or potential environmental issues which the Contractor must address during construction. Issues of concern shall be defined within the Environmental Protection Plan as outlined in this section. The Contractor shall address each topic at a level of detail commensurate with the environmental issue and required construction task(s). Topics or issues which are not identified in this section, but which the Contractor considers necessary, shall be identified and discussed after those items formally identified in this section. Prior to submittal of the Environmental Protection Plan, the Contractor shall meet with the Contracting Officer for the purpose of discussing the implementation of the initial Environmental Protection Plan; possible subsequent additions and revisions to the plan including any reporting requirements; and methods for administration of the Contractor's Environmental Plans. The Environmental Protection Plan shall be current and maintained onsite by the Contractor.

1.7.1 Compliance

No requirement in this Section shall be construed as relieving the Contractor of any applicable Federal, State, and local environmental protection laws and regulations. During Construction, the Contractor shall be responsible for identifying, implementing, and submitting for approval any additional requirements to be included in the Environmental Protection Plan.

1.7.2 Contents

The environmental protection plan shall include, but shall not be limited to, the following:

- a. Name(s) of person(s) within the Contractor's organization who is(are) responsible for ensuring adherence to the Environmental Protection Plan.
- b. Name(s) and qualifications of person(s) responsible for manifesting hazardous waste to be removed from the site, if applicable.
- c. Name(s) and qualifications of person(s) responsible for training the Contractor's environmental protection personnel.
- d. Description of the Contractor's environmental protection personnel training program.
- e. Work area plan showing the proposed activity in each portion of the area and identifying the areas of limited use or nonuse.
- f. The Spill Control plan shall include the procedures, instructions, and reports to be used in the event of an unforeseen spill of a substance regulated by 40 CFR 68, 40 CFR 302, 40 CFR 355, and/or regulated under State or Local laws and regulations. The Spill Control Plan supplements the requirements of EM 385-1-1. This plan shall include as a minimum:

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1. The name of the individual who will report any spills or hazardous substance releases and who will follow up with complete documentation. This individual shall immediately notify the Contracting Officer and the local Fire Department in addition to the legally required Federal, State, and local reporting channels (including the National Response Center 1-800-424-8802) if a reportable quantity is released to the environment. The plan shall contain a list of the required reporting channels and telephone numbers.
 2. The name and qualifications of the individual who will be responsible for implementing and supervising the containment and cleanup.
 3. Training requirements for Contractor's personnel and methods of accomplishing the training.
 4. A list of materials and equipment to be immediately available at the job site, tailored to cleanup work of the potential hazard(s) identified.
 5. The names and locations of suppliers of containment materials and locations of additional fuel oil recovery, cleanup, restoration, and material-placement equipment available in case of an unforeseen spill emergency.
 6. The methods and procedures to be used for expeditious contaminant cleanup.
- g. A non-hazardous solid waste disposal plan identifying methods and locations for solid waste disposal. The plan shall include schedules for disposal. The Contractor shall identify any subcontractors responsible for the transportation and disposal of solid waste. Licenses or permits shall be submitted for solid waste disposal sites that are not a commercial operating facility. Evidence of the disposal facility's acceptance of the solid waste shall be attached to this plan during the construction.
- h. A recycling and solid waste minimization plan with a list of measures to reduce consumption of energy and natural resources. The plan shall detail the Contractor's actions to comply with and to participate in Federal, State, Regional, and local government sponsored recycling programs to reduce the volume of solid waste at the source.
- i. An air pollution control plan detailing provisions to assure that dust, debris, materials, trash, etc., do not become air borne and travel off the project site.
- j. A contaminant prevention plan that: identifies potentially hazardous substances to be used on the job site; identifies the intended actions to prevent introduction of such materials into the air, water, or ground; and details provisions for compliance with Federal, State, and local laws and regulations for storage and handling of these materials. In accordance with EM 385-1-1, a copy of the Material Safety Data Sheets (MSDS) and the maximum quantity of each hazardous material to be on site at any given time shall be included in the contaminant prevention plan. As new hazardous materials are brought on site or removed from the site, the plan shall be updated.

1.7.3 Appendix

Copies of all environmental permits, permit application packages, approvals to construct, notifications, certifications, reports, and termination documents, as appropriate for the work of this project, shall be attached, as an appendix, to the Environmental Protection Plan.

1.8 PROTECTION FEATURES

This paragraph supplements the Contract Clause PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS. Prior to start of any onsite construction activities, the Contractor and the Contracting Officer shall make a joint condition survey. Immediately following the survey, the Contractor shall prepare a brief report including a plan describing the features requiring protection under the provisions of the Contract Clauses, which are not specifically identified on the drawings as environmental features requiring protection along with the condition of trees, shrubs and grassed areas immediately adjacent to the site of work and adjacent to the Contractor's assigned storage area and access route(s), as applicable. This survey report shall be signed by both the Contractor and the Contracting Officer upon mutual agreement as to its accuracy and completeness. The Contractor shall protect those environmental features included in the survey report and any indicated on the drawings, regardless of interference which their preservation may cause to the Contractor's work under the contract.

1.9 ENVIRONMENTAL ASSESSMENT OF CONTRACT DEVIATIONS

Any deviations, requested by the Contractor, from the drawings and specifications which may have an environmental impact will be subject to approval by the Contracting Officer and may require an extended review, processing, and approval time. The Contracting Officer reserves the right to disapprove alternate methods, even if they are more cost effective, if the Contracting Officer determines that the proposed alternate method will have an adverse environmental impact.

1.10 NOTIFICATION

The Contracting Officer will notify the Contractor in writing of any observed noncompliance with Federal, State or local environmental laws or regulations, permits, and other elements of the Contractor's Environmental Protection plan. The Contractor shall, after receipt of such notice, inform the Contracting Officer of the proposed corrective action and take such action when approved by the Contracting Officer. The Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No time extensions shall be granted or equitable adjustments allowed to the Contractor for any such suspensions. This is in addition to any other actions the Contracting Officer may take under the contract, or in accordance with the Federal Acquisition Regulation or Federal Law.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.1 ENVIRONMENTAL PERMITS AND COMMITMENTS

The Contractor shall be responsible for obtaining and complying with all environmental permits and commitments required by Federal, State, Regional,

and local environmental laws and regulations.

3.2 LAND RESOURCES

The Contractor shall confine all activities to areas defined by the drawings and specifications. Prior to the beginning of any construction, the Contractor shall identify any land resources to be preserved within the work area and storage area(s). The Contractor shall not remove, cut, deface, injure, or destroy land resources including trees, shrubs, vines, grasses, topsoil, and land forms without approval. No ropes, cables, or guys shall be fastened to or attached to any trees for anchorage unless specifically authorized. The Contractor shall provide effective protection for land and vegetation resources at all times. The Contractor shall restore landscape features damaged or destroyed during construction operations outside the limits of the approved work area.

3.3 WATER RESOURCES

The Contractor shall monitor construction activities to prevent pollution of surface and ground waters.

3.4 AIR RESOURCES

Equipment operation, activities, or processes performed by the Contractor shall be in accordance with all Federal and State air emission and performance laws and standards. Dust particles; aerosols and gaseous by-products from construction activities shall be controlled at all times, including weekends, holidays and hours when work is not in progress. The Contractor shall maintain work areas within or outside the project boundaries free from particulates which would cause the Federal, State, and local air pollution standards to be exceeded or which would cause a hazard or a nuisance.

3.4.1 Odors

Odors from construction activities shall be controlled at all times. The odors shall not cause a health hazard and shall be in compliance with State regulations and/or local ordinances.

3.4.2 Sound Intrusions

The Contractor shall keep construction activities under surveillance and control to minimize environment damage by noise.

3.4.3 Burning

Burning is prohibited on the project site.

3.5 CHEMICAL MATERIALS MANAGEMENT AND WASTE DISPOSAL

Disposal of wastes shall be as directed below, unless otherwise specified in other sections and/or shown on the drawings.

3.5.1 Solid Wastes

Solid wastes shall be placed in containers which are emptied on a regular schedule. Handling, storage, and disposal shall be conducted to prevent contamination. Segregation measures shall be employed so that no hazardous or toxic waste will become co-mingled with solid waste. The Contractor

shall transport solid waste off of the project site and dispose of it in compliance with Federal, State, and local requirements for solid waste disposal. A Subtitle D RCRA permitted landfill shall be the minimum acceptable off-site solid waste disposal option. The Contractor shall verify that the selected transporters and disposal facilities have the necessary permits and licenses to operate.

3.5.2 Chemicals and Chemical Wastes

Chemicals shall be dispensed ensuring no spillage to the ground or water. Periodic inspections of dispensing areas to identify leakage and initiate corrective action shall be performed and documented. This documentation will be periodically reviewed by the Government. Chemical waste shall be collected in corrosion resistant, compatible containers. Collection drums shall be monitored and removed to a staging or storage area when contents are within 6 inches of the top. Wastes shall be classified, managed, stored, and disposed of in accordance with Federal, State, and local laws and regulations.

3.5.3 Contractor Generated Hazardous Wastes/Excess Hazardous Materials

Hazardous wastes are defined in 40 CFR 261, or are as defined by applicable State and local regulations. Hazardous materials are defined in 49 CFR 171 - 178. The Contractor shall, at a minimum, manage and store hazardous waste in compliance with 40 CFR 262. The Contractor shall take sufficient measures to prevent spillage of hazardous and toxic materials during dispensing. The Contractor shall segregate hazardous waste from other materials and wastes, shall protect it from the weather by placing it in a safe covered location, and shall take precautionary measures such as berming or other appropriate measures against accidental spillage. The Contractor shall be responsible for storage, describing, packaging, labeling, marking, and placarding of hazardous waste and hazardous material in accordance with 49 CFR 171 - 178, State, and local laws and regulations.

The Contractor shall transport Contractor generated hazardous waste off Government property within 30 days in accordance with the Environmental Protection Agency and the Department of Transportation laws and regulations. The Contractor shall dispose of hazardous waste in compliance with Federal, State and local laws and regulations. Spills of hazardous or toxic materials shall be immediately reported to the Contracting Officer. Cleanup and cleanup costs due to spills shall be the Contractor's responsibility. The disposition of Contractor generated hazardous waste and excess hazardous materials are the Contractor's responsibility.

3.5.4 Fuel and Lubricants

Storage, fueling and lubrication of equipment and motor vehicles shall be conducted in a manner that affords the maximum protection against spill and evaporation. Fuel, lubricants and oil shall be managed and stored in accordance with all Federal, State, Regional, and local laws and regulations. Used lubricants and used oil to be discarded shall be stored in marked corrosion-resistant containers and recycled or disposed in accordance with 40 CFR 279, State, and local laws and regulations. There shall be no storage of fuel on the project site. Fuel must be brought to the project site each day that work is performed.

3.6 RECYCLING AND WASTE MINIMIZATION

The Contractor shall participate in State and local government sponsored recycling programs. The Contractor is further encouraged to minimize solid

waste generation throughout the duration of the project.

3.7 BIOLOGICAL RESOURCES

The Contractor shall minimize interference with, disturbance to, and damage to fish, wildlife, and plants including their habitat. The Contractor shall be responsible for the protection of threatened and endangered animal and plant species including their habitat in accordance with Federal, State, Regional, and local laws and regulations.

3.8 MAINTENANCE OF POLLUTION FACILITIES

The Contractor shall maintain permanent and temporary pollution control facilities and devices for the duration of the contract or for that length of time construction activities create the particular pollutant.

3.9 TRAINING OF CONTRACTOR PERSONNEL

The Contractor's personnel shall be trained in all phases of environmental protection and pollution control. The Contractor shall conduct environmental protection/pollution control meetings for all Contractor personnel prior to commencing construction activities. Additional meetings shall be conducted for new personnel and when site conditions change. The training and meeting agenda shall include: methods of detecting and avoiding pollution; familiarization with statutory and contractual pollution standards; installation and care of devices and instruments required for monitoring purposes to ensure adequate and continuous environmental protection/pollution control; anticipated hazardous or toxic chemicals or wastes, and other regulated contaminants; and endangered species and their habitat that are known to be in the area.

3.10 POST CONSTRUCTION CLEANUP

The Contractor shall clean up all areas used for construction in accordance with Contract Clause "Cleaning Up". The Contractor shall, unless otherwise instructed in writing by the Contracting Officer, obliterate all signs of temporary construction facilities such as work areas, structures, stockpiles of excess or waste materials, and other vestiges of construction prior to final acceptance of the work. Disturbed areas shall be graded, filled, and seeded unless otherwise indicated.

-- End of Section --

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SECTION 01420

SOURCES FOR REFERENCE PUBLICATIONS

1.1 REFERENCES

1.2 ORDERING INFORMATION

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SECTION 01420

SOURCES FOR REFERENCE PUBLICATIONS

1.1 REFERENCES

Various publications are referenced in other sections of the specifications to establish requirements for the work. These references are identified in each section by document number, date and title. The document number used in the citation is the number assigned by the standards producing organization, (e.g. ASTM B 564 Nickel Alloy Forgings). However, when the standards producing organization has not assigned a number to a document, an identifying number has been assigned for reference purposes.

1.2 ORDERING INFORMATION

The addresses of the standards publishing organizations whose documents are referenced in other sections of these specifications are listed below, and if the source of the publications is different from the address of the sponsoring organization, that information is also provided. Documents listed in the specifications with numbers which were not assigned by the standards producing organization should be ordered from the source by title rather than by number.

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
1819 L Street, NW, 6th Floor
Washington, DC 20036
Ph: 202-293-8020
Fax: 202-293-9287
E-mail: info@ansi.org
Internet: <http://www.ansi.org/>

Note --- ANSI documents beginning with the letter "S" can be ordered from:

Acoustical Society of America (ASA)
2 Huntington Quadrangle, Suite 1N01
Melville, NY 11747-4502
Ph: 516-576-2360
Fax: 516-576-2377
E-mail: asa@aip.org
Internet: <http://asa.aip.org>

ASME INTERNATIONAL (ASME)
Three Park Avenue
New York, NY 10016-5990
Ph: 212-591-7722
Fax: 212-591-7674
E-mail: infocentral@asme.org
Internet: <http://www.asme.org>

ASTM INTERNATIONAL (ASTM)
100 Barr Harbor Drive, P.O. Box C700
West Conshohocken, PA 19428-2959

REPAIRS TO SERVICE GATES, TOWNSHEND LAKE, VERMONT

Ph: 610-832-9500
Fax: 610-832-9555
E-mail: service@astm.org
Internet: <http://www.astm.org>

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)
1 Batterymarch Park
Quincy, MA 02169-7471
Ph: 617-770-3000
Fax: 617-770-0700
E-mail: webmaster@nfpa.org
Internet: <http://www.nfpa.org>

U.S. ARMY CORPS OF ENGINEERS (USACE)
Order CRD-C DOCUMENTS from:
U.S. Army Engineer Waterways Experiment Station
ATTN: Technical Report Distribution Section, Services
Branch, TIC
3909 Halls Ferry Road
Vicksburg, MS 39180-6199
Ph: 601-634-2664
Fax: 601-634-2388
E-mail: mtc-info@erdc.usace.army.mil
Internet: <http://www.wes.army.mil/SL/MTC/handbook.htm>

Order Other Documents from:
USACE Publications Depot
Attn: CEIM-IM-PD
2803 52nd Avenue
Hyattsville, MD 20781-1102
Ph: 301-394-0081
Fax: 301-394-0084
E-mail: pubs-army@usace.army.mil
Internet: <http://www.usace.army.mil/publications>
or <http://www.hnd.usace.army.mil/techinfo/engpubs.htm>

U.S. GENERAL SERVICES ADMINISTRATION (GSA)
General Services Administration
1800 F Street, NW
Washington, DC 20405
Ph: 202-501-1021

Order from:
General Services Administration
Federal Supply Service Bureau
1941 Jefferson Davis Highway
Arlington, VA 22202
Ph: 703-605-5400
Internet: <http://apps.fss.gsa.gov/pub/fedspecs/indexcfm>

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)
8601 Adelphi Road
College Park, MD 20740-6001
Ph: 866-272-6272
Fax: 301-837-0483
Internet: <http://www.archives.gov>

Order documents from:
Superintendent of Documents

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U.S.Government Printing Office (GPO)
732 North Capitol Street, NW
Washington, DC 20401
Ph: 888-293-6498 or 202-512-1530
Fax: 202-512-1262
E-mail: gpoaccess.gov
Internet: <http://www.gpoaccess.gov>

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SECTION 01451

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SECTION 01451

CONTRACTOR QUALITY CONTROL

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by basic designation only.

ASTM INTERNATIONAL (ASTM)

| | |
|-------------|---|
| ASTM D 3740 | (2001) Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction |
|-------------|---|

| | |
|------------|---|
| ASTM E 329 | (2000b) Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction |
|------------|---|

1.2 PAYMENT

Separate payment will not be made for providing and maintaining an effective Quality Control program, and all costs associated therewith shall be included in the applicable unit prices or lump-sum prices contained in the Bidding Schedule.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

The Contractor is responsible for quality control and shall establish and maintain an effective quality control system in compliance with the Contract Clause titled "Inspection of Construction". The quality control system shall consist of plans, procedures, and organization necessary to produce an end product which complies with the contract requirements. The system shall cover all construction operations, both onsite and offsite, and shall be keyed to the proposed construction sequence. The site project superintendent will be held responsible for the quality of work on the job and is subject to removal by the Contracting Officer for non-compliance with the quality requirements specified in the contract. The site project superintendent in this context shall be the highest level manager responsible for the overall construction activities at the site, including quality and production. The site project superintendent shall maintain a physical presence at the site at all times, except as otherwise acceptable to the Contracting Officer, and shall be responsible for all construction and construction related activities at the site.

3.2 COORDINATION MEETING

After the Preconstruction Conference and before start of construction, the Contractor shall meet with the Contracting Officer or Authorized Representative and discuss the Contractor's quality control system. During the meeting, a mutual understanding of the system details shall be developed, including the forms for recording the CQC operations, control activities, testing, administration of the system for both onsite and offsite work, and the interrelationship of Contractor's Management and control with the Government's Quality Assurance. Minutes of the meeting shall be prepared by the Government and signed by both the Contractor and the Contracting Officer. The minutes shall become a part of the contract file. There may be occasions when subsequent conferences will be called by either party to reconfirm mutual understandings and/or address deficiencies in the CQC system or procedures which may require corrective action by the Contractor.

3.3 QUALITY CONTROL ORGANIZATION

3.3.1 Personnel Requirements

The requirements for the CQC organization are a CQC System Manager and sufficient number of additional qualified personnel to ensure safety and contract compliance. The Safety and Health Manager shall receive direction and authority from the CQC System Manager and shall serve as a member of the CQC staff. Personnel identified in the technical provisions as requiring specialized skills to assure the required work is being performed properly will also be included as part of the CQC organization. The Contractor's CQC staff shall maintain a presence at the site at all times during progress of the work and have complete authority and responsibility to take any action necessary to ensure contract compliance. The CQC staff shall be subject to acceptance by the Contracting Officer. The Contractor shall provide adequate office space, filing systems and other resources as necessary to maintain an effective and fully functional CQC organization. Complete records of all letters, material submittals, shop drawing submittals, schedules and all other project documentation shall be promptly furnished to the CQC organization by the Contractor. The CQC organization shall be responsible to maintain these documents and records at the site at all times, except as otherwise acceptable to the Contracting Officer.

3.3.2 CQC System Manager

The Contractor shall identify as CQC System Manager an individual within the onsite work organization who shall be responsible for overall management of CQC and have the authority to act in all CQC matters for the Contractor. The CQC System Manager shall be a construction person with a minimum of two years in related work. This CQC System Manager shall be on the site at all times during construction and shall be employed by the prime Contractor. The CQC System Manager shall be assigned as System Manager but may have duties as project superintendent in addition to quality control. An alternate for the CQC System Manager shall be identified in the plan to serve in the event of the System Manager's absence. The requirements for the alternate shall be the same as for the designated CQC System Manager.

3.3.3 Organizational Changes

The Contractor shall maintain the CQC staff at full strength at all times. When it is necessary to make changes to the CQC staff, the Contractor shall

revise the CQC Plan to reflect the changes and submit the changes to the Contracting Officer for acceptance.

3.4 SUBMITTALS AND DELIVERABLES

Submittals, if needed, shall be made as specified in Section 01330 SUBMITTAL PROCEDURES. The CQC organization shall be responsible for certifying that all submittals and deliverables are in compliance with the contract requirements.

3.5 CONTROL

Contractor Quality Control is the means by which the Contractor ensures that the construction, to include that of subcontractors and suppliers, complies with the requirements of the contract. At least three phases of control shall be conducted by the CQC System Manager for each definable feature of the construction work as follows:

3.5.1 Preparatory Phase

This phase shall be performed prior to beginning work on each definable feature of work, after all required plans/documents/materials are approved/accepted, and after copies are at the work site. This phase shall include:

- a. A review of each paragraph of applicable specifications, reference codes, and standards. A copy of those sections of referenced codes and standards applicable to that portion of the work to be accomplished in the field shall be made available by the Contractor at the preparatory inspection. These copies shall be maintained in the field and available for use by Government personnel until final acceptance of the work.
- b. A review of the contract drawings.
- c. A check to assure that all materials and/or equipment have been tested, submitted, and approved.
- d. Review of provisions that have been made to provide required control inspection and testing.
- e. Examination of the work area to assure that all required preliminary work has been completed and is in compliance with the contract.
- f. A physical examination of required materials, equipment, and sample work to assure that they are on hand, conform to approved shop drawings or submitted data, and are properly stored.
- g. A review of the appropriate activity hazard analysis to assure safety requirements are met.
- h. Discussion of procedures for controlling quality of the work including repetitive deficiencies. Document construction tolerances and workmanship standards for that feature of work.
- i. A check to ensure that the portion of the plan for the work to be performed has been accepted by the Contracting Officer.

- j. Discussion of the initial control phase.
- k. The Government shall be notified at least 24 hours in advance of beginning the preparatory control phase. This phase shall include a meeting conducted by the CQC System Manager and attended by the superintendent, other CQC personnel (as applicable), and the foreman responsible for the definable feature. The results of the preparatory phase actions shall be documented by separate minutes prepared by the CQC System Manager and attached to the daily CQC report. The Contractor shall instruct applicable workers as to the acceptable level of workmanship required in order to meet contract specifications.

3.5.2 Initial Phase

This phase shall be accomplished at the beginning of a definable feature of work. The following shall be accomplished:

- a. A check of work to ensure that it is in full compliance with contract requirements. Review minutes of the preparatory meeting.
- b. Verify adequacy of controls to ensure full contract compliance. Verify required control inspection and testing.
- c. Establish level of workmanship and verify that it meets minimum acceptable workmanship standards. Compare with required sample panels as appropriate.
- d. Resolve all differences.
- e. Check safety to include compliance with and upgrading of the safety plan and activity hazard analysis. Review the activity analysis with each worker.
- f. The Government shall be notified at least 24 hours in advance of beginning the initial phase. Separate minutes of this phase shall be prepared by the CQC System Manager and attached to the daily CQC report. Exact location of initial phase shall be indicated for future reference and comparison with follow-up phases.
- g. The initial phase should be repeated for each new crew to work onsite, or any time acceptable specified quality standards are not being met.

3.5.3 Follow-up Phase

Daily checks shall be performed to assure control activities, including control testing, are providing continued compliance with contract requirements, until completion of the particular feature of work. The checks shall be made a matter of record in the CQC documentation. Final follow-up checks shall be conducted and all deficiencies corrected prior to the start of additional features of work which may be affected by the deficient work. The Contractor shall not build upon nor conceal non-conforming work.

3.5.4 Additional Preparatory and Initial Phases

Additional preparatory and initial phases shall be conducted on the same definable features of work if: the quality of on-going work is

unacceptable; if there are changes in the applicable CQC staff, onsite production supervision or work crew; if work on a definable feature is resumed after a substantial period of inactivity; or if other problems develop.

3.6 TESTS

3.6.1 Testing Procedure

The Contractor shall perform specified or required tests to verify that control measures are adequate to provide a product which conforms to contract requirements. Upon request, the Contractor shall furnish to the Government duplicate samples of test specimens for possible testing by the Government. Testing includes operation and/or acceptance tests when specified. The Contractor shall procure the services of a Corps of Engineers approved testing laboratory or establish an approved testing laboratory at the project site. The Contractor shall perform the following activities and record and provide the following data:

- a. Verify that testing procedures comply with contract requirements.
- b. Verify that facilities and testing equipment are available and comply with testing standards.
- c. Check test instrument calibration data against certified standards.
- d. Verify that recording forms and test identification control number system, including all of the test documentation requirements, have been prepared.
- e. Results of all tests taken, both passing and failing tests, shall be recorded on the CQC report for the date taken. Specification paragraph reference, location where tests were taken, and the sequential control number identifying the test shall be given. If approved by the Contracting Officer, actual test reports may be submitted later with a reference to the test number and date taken. An information copy of tests performed by an offsite or commercial test facility shall be provided directly to the Contracting Officer. Failure to submit timely test reports as stated may result in nonpayment for related work performed and disapproval of the test facility for this contract.

3.6.2 Testing Laboratories

3.6.2.1 Capability Check

The Government reserves the right to check laboratory equipment in the proposed laboratory for compliance with the standards set forth in the contract specifications and to check the laboratory technician's testing procedures and techniques. Laboratories utilized for testing soils, concrete, asphalt, and steel shall meet criteria detailed in ASTM D 3740 and ASTM E 329.

3.6.2.2 Capability Recheck

If the selected laboratory fails the capability check, the Contractor will be assessed a charge of \$1,500.00 to reimburse the Government for each succeeding recheck of the laboratory or the checking of a subsequently selected laboratory. Such costs will be deducted from the contract amount

due the Contractor.

3.6.3 Onsite Laboratory

The Government reserves the right to utilize the Contractor's control testing laboratory and equipment to make assurance tests, and to check the Contractor's testing procedures, techniques, and test results at no additional cost to the Government.

3.6.4 Furnishing or Transportation of Samples for Testing

Costs incidental to the transportation of samples or materials shall be borne by the Contractor. Samples of materials for test verification and acceptance testing by the Government shall be delivered to the Corps of Engineers, New England District, 696 Virginia Road, Concord, Massachusetts 01742-2751. Coordination for each specific test, exact delivery location, and dates will be made through the Area Office.

3.7 COMPLETION INSPECTION

3.7.1 Punch-Out Inspection

Near the end of the work, or any increment of the work established by a time stated in the SPECIAL CONTRACT REQUIREMENTS Clause, "Commencement, Prosecution, and Completion of Work", or by the specifications, the CQC Manager shall conduct an inspection of the work. A punch list of items which do not conform to the approved drawings and specifications shall be prepared and included in the CQC documentation, as required by paragraph DOCUMENTATION. The list of deficiencies shall include the estimated date by which the deficiencies will be corrected. The CQC System Manager or staff shall make a second inspection to ascertain that all deficiencies have been corrected. Once this is accomplished, the Contractor shall notify the Government that the facility is ready for the Government Pre-Final inspection.

3.7.2 Pre-Final Inspection

The Government will perform the pre-final inspection to verify that the facility is complete and ready to be occupied. A Government Pre-Final Punch List may be developed as a result of this inspection. The Contractor's CQC System Manager shall ensure that all items on this list have been corrected before notifying the Government, so that a Final inspection with the customer can be scheduled. Any items noted on the Pre-Final inspection shall be corrected in a timely manner. These inspections and any deficiency corrections required by this paragraph shall be accomplished within the time slated for completion of the entire work or any particular increment of the work if the project is divided into increments by separate completion dates.

3.7.3 Final Acceptance Inspection

The Contractor's Quality Control Inspection personnel, plus the superintendent or other primary management person, and the Contracting Officer's Representative shall be in attendance at the final acceptance inspection. Additional Government personnel including, but not limited to, those from Base/Post Civil Facility Engineer user groups, and major commands may also be in attendance. The final acceptance inspection will be formally scheduled by the Contracting Officer based upon results of the Pre-Final inspection. Notice shall be given to the Contracting Officer at

least 14 days prior to the final acceptance inspection and shall include the Contractor's assurance that all specific items previously identified to the Contractor as being unacceptable, along with all remaining work performed under the contract, will be complete and acceptable by the date scheduled for the final acceptance inspection. Failure of the Contractor to have all contract work acceptably complete for this inspection will be cause for the Contracting Officer to bill the Contractor for the Government's additional inspection cost in accordance with the contract clause titled "Inspection of Construction".

3.8 DOCUMENTATION

The Contractor shall maintain current records providing factual evidence that required quality control activities and/or tests have been performed. These records shall include the work of subcontractors and suppliers and shall be on an acceptable form that includes, as a minimum, the following information:

- a. Contractor/subcontractor and their area of responsibility.
- b. Operating plant/equipment with hours worked, idle, or down for repair.
- c. Work performed each day, giving location, description, and by whom. When Network Analysis (NAS) is used, identify each phase of work performed each day by NAS activity number.
- d. Test and/or control activities performed with results and references to specifications/drawings requirements. The control phase shall be identified (Preparatory, Initial, Follow-up). List of deficiencies noted, along with corrective action.
- e. Quantity of materials received at the site with statement as to acceptability, storage, and reference to specifications/drawings requirements.
- f. Submittals and deliverables reviewed, with contract reference, by whom, and action taken.
- g. Offsite surveillance activities, including actions taken.
- h. Job safety evaluations stating what was checked, results, and instructions or corrective actions.
- i. Instructions given/received and conflicts in plans and/or specifications.
- j. Contractor's verification statement.

These records shall indicate a description of trades working on the project; the number of personnel working; weather conditions encountered; and any delays encountered. These records shall cover both conforming and deficient features and shall include a statement that equipment and materials incorporated in the work and workmanship comply with the contract. The original and one copy of these records in report form shall be furnished to the Government daily within 24 hours after the date covered by the report, except that reports need not be submitted for days on which no work is performed. As a minimum, one report shall be prepared and submitted for every 7 days of no work and on the last day of a no work

period. All calendar days shall be accounted for throughout the life of the contract. The first report following a day of no work shall be for that day only. Reports shall be signed and dated by the CQC System Manager. The report from the CQC System Manager shall include copies of test reports and copies of reports prepared by all subordinate quality control personnel.

3.9 SAMPLE FORMS

A sample "Daily Construction Quality Control Report" is included at the end of this section.

3.10 NOTIFICATION OF NONCOMPLIANCE

The Contracting Officer will notify the Contractor of any detected noncompliance with the foregoing requirements. The Contractor shall take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, shall be deemed sufficient for the purpose of notification. If the Contractor fails or refuses to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

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Contractor/Sub. Name _____

DAILY CONSTRUCTION QUALITY CONTROL REPORT

Date: _____

Day: _____

Contract No: _____

Description and Location of Work: _____

Tide: (high) (low) (high) (low) Sea Condition: _____

Weather: Temp: _____ Cloud condition _____ Wind speed/direction _____

Environmental Protection: _____

Management

Area of responsibility

- a. Consultant - _____
- b. Contractor - _____
- c. Subcontractor - _____
- d. Purveyor - _____
- e. Supplier - _____
- f. Technical Support - _____

1. WORK PERFORMED TODAY (Indicate location and description of work performed. Refer to work performed by individuals listed by letter above.) _____

2. Results of Surveillance (Include satisfactory work completed, or deficiencies with action to be taken.)

a. Preparatory Inspection: _____

b. Initial Inspection: _____

c. Follow-up Inspection: _____

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3. Tests Required by Specifications, Performed, and the Results:

- a. _____
- b. _____
- c. _____

4. Verbal Instruction Received; (List any instructions given by Government personnel on construction deficiencies, retesting required, etc. and action.)

5. Remarks: (Cover all conflicts in plans, specifications, or instructions.)

6. Safety Inspection (Report violations, corrective instruction given; and corrective actions taken.)

7. Quantities Completed;

| | |
|-----------|-----------|
| Item # | Item # |
| Quantity: | Quantity: |
| ----- | |
| Item # | Item # |
| Item # | Quantity: |
| ----- | |

8. Time

| # | <u>LABOR</u> | <u>HOURS</u> | <u>EQUIPMENT</u> |
|-------|--------------|--------------|------------------|
| ----- | ----- | ----- | ----- |
| ----- | ----- | ----- | ----- |
| ----- | ----- | ----- | ----- |
| ----- | ----- | ----- | ----- |
| ----- | ----- | ----- | ----- |
| ----- | ----- | ----- | ----- |

9. Additional Comments:

Contractor's Verification: The above report is complete and correct and all material and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

-- End of Section --

Contractor Quality Control Representative

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SECTION 01500

TEMPORARY CONSTRUCTION FACILITIES

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1 (2003) Safety and Health Requirements Manual

1.2 EMPLOYEE PARKING

Contractor employees shall park privately owned vehicles in an area designated by the Contracting Officer. This area will be within reasonable walking distance of the construction site. Contractor employee parking shall not interfere with existing and established parking requirements of the installation.

1.3 AVAILABILITY OF WATER AND ELECTRICITY

Water is not available in the Gate House. The Contractor shall supply all water required for the prosecution of the work.

The Government will furnish electricity from existing points of supply. The Contractor shall make his own investigations as to the availability, convenience, and suitability of this supply for use on this project. Electricity required in the prosecution of the work in excess of that available from existing points of supply shall be furnished by the Contractor at his own expense. The Contractor shall conserve government furnished electricity.

1.3.1 Temporary Electrical Equipment and Connections

The Contractor, at his own expense and in a workmanlike manner satisfactory to the Contracting Officer, shall install and maintain all necessary temporary connections and distribution lines, and he shall remove them prior to final acceptance of the construction. All required temporary electrical equipment and lines shall be furnished, installed, connected, and maintained by the Contractor according to the EM 385-1-1, Section 11.D and shall be removed prior to final acceptance of the work. Materials and equipment need not be new, but must be in good repair and serviceable condition. Periodic inspections of systems and devices will be made by the Contractor at intervals not to exceed one week.

1.4 SANITARY FACILITIES

Adequate field-type sanitary conveniences of a type approved for the use of persons employed on the work shall be provided, properly secluded from

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public observation, and maintained by the Contractor in such a manner as required or approved by the Contracting Officer. These conveniences shall be maintained at all times without nuisance. Upon completion of the work, the conveniences shall be removed by the Contractor from the premises, leaving the premises clean and free from nuisance. Project site toilet facilities will not be available to Contractor's personnel.

1.5 TELEPHONE SERVICE

The Contractor shall make arrangements and pay all costs for telephone facilities desired.

1.6 PROTECTION AND MAINTENANCE OF TRAFFIC

The Contractor shall maintain and protect traffic on all affected roads during the construction period except as otherwise specifically directed by the Contracting Officer. The traveling public shall be protected from damage to person and property. The Contractor's traffic on roads selected for hauling material to and from the site shall interfere as little as possible with public traffic. The Contractor shall investigate the adequacy of existing roads and the allowable load limit on these roads. The Contractor shall be responsible for the repair of any damage to roads caused by construction operations.

1.6.1 Barricades

The Contractor shall erect and maintain temporary barricades to limit public access to hazardous areas. Such barricades shall be required whenever safe public access to paved areas such as roads, parking areas or sidewalks is prevented by construction activities or as otherwise necessary to ensure the safety of both pedestrian and vehicular traffic. Barricades shall be securely placed, clearly visible with adequate illumination to provide sufficient visual warning of the hazard during both day and night.

1.7 PLANT COMMUNICATION

Whenever the Contractor has the individual elements of its plant so located that operation by normal voice between these elements is not satisfactory, the Contractor shall install a satisfactory means of communication, such as telephone or other suitable devices. The devices shall be made available for use by Government personnel.

1.8 SECURITY

The Contractor shall be responsible for site security during the course of the work.

1.9 CLEANUP

Construction debris, waste materials, packaging material and the like shall be removed from the work site daily. Any dirt or mud which is tracked onto paved or surfaced roadways shall be cleaned away. Stored material not in trailers shall be neatly stacked.

1.10 CONTRACTOR'S STORAGE AREA

Area within the project limits is available for use by the Contractor, for work, storage of equipment, materials and trailers during the life of this contract. A site will be determined at a prework conference prior to

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commencing work. The Contractor shall confine his storage areas to the limits as designated or approved by the Contracting Officer and shall be responsible for the security of the areas. Upon completion of the contract, the Contractor shall remove all equipment and materials, except as otherwise specified, and restore the site to its original condition as approved by the Contracting Officer at no additional cost to the Government.

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SECTION 01525

SAFETY AND OCCUPATIONAL HEALTH REQUIREMENTS

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI Z359.1 (1999) Safety Requirements for Personal Fall Arrest Systems, Subsystems and Components

ASME INTERNATIONAL (ASME)

ASME B30.5 (2000) Mobile and Locomotive Cranes

ASME B30.22 (2000) Articulating Boom Cranes

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

29 CFR 1910.94 Ventilation

29 CFR 1910.120 Hazardous Waste Operations and Emergency Response

29 CFR 1926.65 Hazardous Waste Operations and Emergency Response

29 CFR 1926.500 Fall Protection

U. S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1 (2003) Safety and Health Requirements Manual

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 10 (1998; Errata 10-98-1) Portable Fire Extinguishers

NFPA 70 (2002) National Electrical Code

NFPA 241 (2000) Safeguarding Construction, Alteration, and Demolition Operations

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation;

submittals not having a "G" designation are for information only or as otherwise designated. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Accident Prevention Plan (APP); G, RO

Activity Hazard Analysis (AHA); G, RO

Crane Critical Lift Plan; G, RO

SD-06 Test Reports

Submit reports as their incidence occurs, in accordance with the requirements of the paragraph entitled, "Reports".

Accident Reports

Monthly Exposure Reports

Regulatory Citations and Violations

Crane Reports

1.3 DEFINITIONS

a. High Visibility Accident. Any mishap which may generate publicity and/or high visibility.

b. Low-slope roof. A roof having a slope less than or equal to 4 in 12 (vertical to horizontal).

c. Medical Treatment. Treatment administered by a physician or by registered professional personnel under the standing orders of a physician. Medical treatment does not include first aid treatment even through provided by a physician or registered personnel.

d. Multi-Employer Work Site (MEWS). A multi-employer work site, as defined by OSHA, is one in which many employers occupy the same site. The Government considers the Prime Contractor to be the "controlling authority" for all work site safety and health of the subcontractors.

e. Operating Envelope. The area surrounding any crane. Inside this "envelope" is the crane, the operator, riggers, rigging gear between the hook and the load, the load and the crane's supporting structure (ground, rail, etc.).

f. Recordable Injuries or Illnesses. Any work-related injury or illness that results in:

- (1) Death, regardless of the time between the injury and death, or the length of the illness;
- (2) Days away from work;
- (3) Restricted work;

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- (4) Transfer to another job;
 - (5) Medical treatment beyond first aid;
 - (6) Loss of consciousness; or
 - (7) A significant injury or illness diagnosed by a physician or other licensed health care professional, even if it did not result in (1) through (6) above.
- g. Site Safety and Health Officer (SSHO). The superintendent or other qualified or competent person who is responsible for the on-site safety and health required for the project. The Contractor quality control (QC) person can be the SSHO on this project.
- h. Steep roof. A roof having a slope greater than 4 in 12 (vertical to horizontal).
- i. "USACE" property and equipment specified in EM 385-1-1 should be interpreted as Government property and equipment.
- j. Weight Handling Equipment (WHE) Accident. A WHE accident occurs when any one or more of the six elements in the operating envelope fails to perform correctly during operation, including operation during maintenance or testing resulting in personnel injury or death; material or equipment damage; dropped load; derailment; two-blocking; overload; and collision, including unplanned contact between the load, crane, and/or other objects. A dropped load, derailment, two-blocking, overload and collision are considered accidents even though no material damage or injury occurs. A component failure (e.g., motor burnout, gear tooth failure, bearing failure) is not considered an accident solely due to material or equipment damage unless the component failure results in damage to other components (e.g., dropped boom, dropped load, roll over, etc.).

1.4 REGULATORY REQUIREMENTS

In addition to the detailed requirements included in the provisions of this contract, work performed shall comply with EM 385-1-1. Submit matters of interpretation of standards to the appropriate administrative agency for resolution before starting work. Where the requirements of this specification, applicable laws, criteria, ordinances, regulations, and referenced documents vary, the most stringent requirements shall apply.

1.5 DRUG PREVENTION PROGRAM

Conduct a proactive drug and alcohol use prevention program for all workers, prime and subcontractor, on the site. Ensure that no employee uses illegal drugs or consumes alcohol during work hours. Ensure there are no employees under the influence of drugs or alcohol during work hours. After accidents, collect blood, urine, or saliva specimens and test the injured and involved employees for the influence of drugs and alcohol. A copy of the test shall be made available to the Contracting Officer upon request.

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1.6 SITE QUALIFICATIONS, DUTIES AND MEETINGS

1.6.1 Personnel Qualifications

1.6.1.1 Site Safety and Health Officer (SSHO)

The Site Safety and Health Officer (SSHO) shall be provided at the work site at all times to perform safety and occupational health management, surveillance, inspections, and safety enforcement for the Contractor. The SSHO shall meet the following requirements:

Level 1:

- Worked on similar projects.

- 10-hour OSHA construction safety class or equivalent within last 3 years.

- Competent person training as needed.

1.6.1.2 Crane Operators

Crane operators shall meet the requirements in EM 385-1-1, Appendix G.

1.6.2 Personnel Duties

1.6.2.1 Site Safety and Health Officer (SSHO)/Superintendent

- a. Conduct daily safety and health inspections and maintain a written log which includes area/operation inspected, date of inspection, identified hazards, recommended corrective actions, estimated and actual dates of corrections. Safety inspection logs shall be attached to the Contractors' daily quality control report.

- b. Conduct mishap investigations and complete required reports. Maintain the OSHA Form 300 and Daily Production reports for prime and sub-contractors.

- c. Maintain applicable safety reference material on the job site.

- d. Attend the pre-construction conference, pre-work meetings including preparatory inspection meeting, and periodic in-progress meetings.

- e. Implement and enforce accepted APPS and AHAs.

- f. Maintain a safety and health deficiency tracking system that monitors outstanding deficiencies until resolution. A list of unresolved safety and health deficiencies shall be posted on the safety bulletin board.

- g. Ensure sub-contractor compliance with safety and health requirements.

Failure to perform the above duties will result in dismissal of the superintendent and/or SSHO, and a project work stoppage. The project work stoppage will remain in effect pending approval of a suitable replacement.

1.6.3 Meetings

1.6.3.1 Preconstruction Conference

- a. The Contractor will be informed, in writing, of the date of the

preconstruction conference. The purpose of the preconstruction conference is for the Contractor and the Contracting Officer's representatives to become acquainted and explain the functions and operating procedures of their respective organizations and to reach mutual understanding relative to the administration of the overall project's APP before the initiation of work.

b. Contractor representatives who have a responsibility or significant role in accident prevention on the project shall attend the preconstruction conference. This includes the project superintendent, site safety and health officer, quality control supervisor, or any other assigned safety and health professionals who participated in the development of the APP (including the AHAs and special plans, program and procedures associated with it).

c. The Contractor shall discuss the details of the submitted APP to include incorporated plans, programs, procedures and a listing of anticipated activity hazard analyses (AHAs) that will be developed and implemented during the performance of the contract. This list of proposed AHAs will be reviewed at the conference and an agreement will be reached between the Contractor and the Contracting Officer's representative as to which phases will require an analysis. In addition, a schedule for the preparation, submittal, review, and acceptance of AHAs shall be established to preclude project delays.

d. Deficiencies in the submitted APP will be brought to the attention of the Contractor at the preconstruction conference, and the Contractor shall revise the plan to correct deficiencies and re-submit it for acceptance. Work shall not begin until there is an accepted APP.

1.6.3.2 Weekly Safety Meetings

Conduct weekly safety meetings at the project site for all employees. The Contracting Officer will be informed of the meeting in advance and be allowed attendance. Minutes showing contract title, signatures of attendees and a list of topics discussed shall be attached to the Contractors' daily quality control report. A copy of a suggested weekly safety meeting form is attached at the end of this section.

1.6.3.3 Work Phase Meetings

The appropriate AHA shall be reviewed and attendance documented by the Contractor at the preparatory, initial, and follow-up phases of quality control inspection. The analysis should be used during daily inspections to ensure the implementation and effectiveness of safety and health controls.

1.7 TRAINING

1.7.1 New Employee Indoctrination

New employees (prime and sub-contractor) will be informed of specific site hazards before they begin work. Documentation of this orientation shall be kept on file at the project site.

1.7.2 Periodic Training

Provide Safety and Health Training in accordance with EM 385-1-1 and the accepted APP. Ensure all required training has been accomplished for all onsite employees.

1.7.3 Training on Activity Hazard Analysis (AHA)

Prior to beginning a new phase, training will be provided to all affected employees to include a review of the AHA to be implemented.

1.8 ACCIDENT PREVENTION PLAN (APP)

The Contractor shall use a qualified person to prepare the written site-specific APP. Prepare the APP in accordance with the format and requirements of EM 385-1-1 and as supplemented herein. Cover all paragraph and subparagraph elements in EM 385-1-1, Appendix A, "Minimum Basic Outline for Preparation of Accident Prevention Plan". Where a paragraph or subparagraph element is not applicable to the work to be performed indicate "Not Applicable" next to the heading. Specific requirements for some of the APP elements are described below at paragraph 1.8.1. The APP shall be job-specific and shall address any unusual or unique aspects of the project or activity for which it is written. The APP shall interface with the Contractor's overall safety and health program. Any portions of the Contractor's overall safety and health program referenced in the APP shall be included in the applicable APP element and made site-specific. The Government considers the Prime Contractor to be the "controlling authority" for all work site safety and health of the subcontractors. Contractors are responsible for informing their subcontractors of the safety provisions under the terms of the contract and the penalties for noncompliance, coordinating the work to prevent one craft from interfering with or creating hazardous working conditions for other crafts, and inspecting subcontractor operations to ensure that accident prevention responsibilities are being carried out. The APP shall be signed by the person and firm (senior person) preparing the APP, the Contractor, the on-site superintendent, and the designated site safety and health officer .

Submit the APP to the Contracting Officer 15 calendar days prior to the date of the preconstruction conference for acceptance. Work cannot proceed without an accepted APP. The Contracting Officer reviews and comments on the Contractor's submitted APP and accepts it when it meets the requirements of the contract provisions.

Once accepted by the Contracting Officer, the APP and attachments will be enforced as part of the contract. Disregarding the provisions of this contract or the accepted APP will be cause for stopping of work, at the discretion of the Contracting Officer, until the matter has been rectified.

Once work begins, changes to the accepted APP shall be made with the knowledge and concurrence of the Contracting Officer, project superintendent, SSHO and quality control manager. Should any unforeseen hazard become evident during the performance of work, the project superintendent shall inform the Contracting Officer, both verbally and in writing, for resolution as soon as possible. In the interim, all necessary action shall be taken by the Contractor to restore and maintain safe working conditions in order to safeguard onsite personnel, visitors, the public, and the environment.

Copies of the accepted plan will be maintained at the Contracting Officer's office and at the job site. The APP shall be continuously reviewed and amended, as necessary, throughout the life of the contract. Unusual or high-hazard activities not identified in the original APP shall be incorporated in the plan as they are discovered.

1.8.1 EM 385-1-1 Contents

In addition to the requirements outlines in Appendix A of EM 385-1-1, the following is required:

- a. Names and qualifications (resumes including education, training, experience and certifications) of all site safety and health personnel designated to perform work on this project to include the designated site safety and health officer and other competent and qualified personnel to be used. The duties of each position shall be specified.
- b. Qualifications of competent and of qualified persons. As a minimum, competent persons shall be designated and qualifications submitted for each of the following major areas: scaffolding; fall protection; hazardous energy; health hazard recognition, evaluation and control of chemical, physical and biological agents; personal protective equipment and clothing to include selection, use and maintenance.
- c. Health Hazard Control Program. The Contractor shall designate a competent and qualified person to establish and oversee a Health Hazard Control Program in accordance with EM 385-1-1, Section 6. The program shall ensure that employees, on-site Government representatives, and others, are not adversely exposed to chemical, physical and biological agents and that necessary controls and protective actions are instituted to ensure health.
- d. Crane Critical Lift Plan. Prepare and sign weight handling critical lift plans for lifts over 75 percent of crane hoist's maximum load limit; lifts involving more than one crane or hoist; lifts of personnel; and technically difficult lifts involving non-routine rigging or operation, sensitive equipment, or unusual safety risks in accordance with EM 385-1-1, paragraph 16.c.18. and submit 15 calendar days prior to on-site work.
- e. Alcohol and Drug Abuse Plan
 - (1) Describe plan for random checks and testing with pre-employment screening in accordance with the DFAR Clause subpart 252.223-7004, "Drug Free Work Force."
 - (2) Description of the on-site prevention program
- f. Fall Protection and Prevention (FP&P) Plan. The plan shall be site specific and address all fall hazards in the work place and during different phases of construction. It shall address how to protect and prevent workers from falling to lower levels when they are exposed to fall hazards above 1.8 m (6 feet). A qualified person shall prepare and sign the plan. The plan shall include fall protection and prevention systems, equipment and methods employed for every phase of work, responsibilities, rescue and escape equipment and operations, training requirements, and monitoring methods. Fall Protection and Prevention Plan shall be revised for lengthy projects, reflecting any changes during the course of construction due to changes in personnel, equipment, systems or work habits. The accepted Fall Protection and Prevention Plan shall be kept and maintained at the job site for the duration of the project.
- g. Training Records and Requirements. List of mandatory training and

certifications which are applicable to this project (e.g. explosive actuated tools, fall protection, crane operation, vehicle operator, forklift operators, personal protective equipment); list of requirements for periodic retraining/certification; outline requirements for supervisory and employee safety meetings.

1.9 ACTIVITY HAZARD ANALYSIS (AHA)

The Activity Hazard Analysis (AHA) format shall be in accordance with EM 385-1-1. Submit the AHA for review at least 15 calendar days prior to the start of each phase. Format subsequent AHA as amendments to the APP. An AHA will be developed by the Contractor for every operation involving a type of work presenting hazards not experienced in previous project operations or where a new work crew or subcontractor is to perform work. The analysis must identify and evaluate hazards and outline the proposed methods and techniques for the safe completion of each phase of work. At a minimum, define activity being performed, sequence of work, specific safety and health hazards anticipated, control measures (to include personal protective equipment) to eliminate or reduce each hazard to acceptable levels, equipment to be used, inspection requirements, training requirements for all involved, and the competent person in charge of that phase of work. For work with fall hazards, including fall hazards associated with scaffold erection and removal, identify the appropriate fall arrest systems. For work with materials handling equipment, address safeguarding measures related to materials handling equipment. For work requiring excavations, include requirements for safeguarding excavations. An activity requiring an AHA shall not proceed until the AHA has been accepted by the Contracting Officer's representative and a meeting has been conducted by the Contractor to discuss its contents with everyone engaged in the activity, including on-site Government representatives. The Contractor shall document meeting attendance at the preparatory, initial, and follow-up phases of quality control inspection. The AHA shall be continuously reviewed and, when appropriate, modified to address changing site conditions or operations. The analysis should be used during daily inspections to ensure the implementation and effectiveness of the activity's safety and health controls.

The AHA list will be reviewed periodically (at least monthly) at the Contractor supervisory safety meeting and updated as necessary when procedures, scheduling, or hazards change.

Activity hazard analyses shall be updated as necessary to provide an effective response to changing work conditions and activities. The on-site superintendent, site safety and health officer and competent persons used to develop the AHAs, including updates, shall sign and date the AHAs before they are implemented.

1.10 DISPLAY OF SAFETY INFORMATION

Within 10 calendar days after commencement of work, erect a safety bulletin board at the job site. The following information shall be displayed on the safety bulletin board in clear view of the on-site construction personnel, maintained current, and protected against the elements and unauthorized removal:

- a. Map denoting the route to the nearest emergency care facility.
- b. Emergency phone numbers.

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- c. Copy of the most up-to-date APP.
- d. AHA(s).
- e. OSHA 300A Form.
- f. OSHA Safety and Health Protection-On-The-Job Poster.

1.11 SITE SAFETY REFERENCE MATERIALS

Maintain safety-related references applicable to the project, including those listed in the article "References". Maintain applicable equipment manufacturer's manuals.

1.12 EMERGENCY MEDICAL TREATMENT

Contractors will arrange for their own emergency medical treatment. Government has no responsibility to provide emergency medical treatment.

1.13 REPORTS

1.13.1 Accident Reports

a. For recordable injuries and illnesses, and property damage accidents resulting in at least \$2,000 in damages, the Prime Contractor shall conduct an accident investigation to establish the root cause(s) of the accident, complete the USACE Accident Report Form 3394 and provide the report to the Contracting Officer within 1 calendar day of the accident. The Contracting Officer will provide copies of any required or special forms.

b. For a weight handling equipment accident the Prime Contractor shall conduct an accident investigation to establish the root cause(s) of the accident, complete the WHE Accident Report form and provide the report to the Contracting Officer within 30 calendar days of the accident. The Contracting Officer will provide a blank copy of the accident report form.

1.13.2 Accident Notification

Notify the Contracting Officer as soon as practical, but not later than four hours, after any accident meeting the definition of Recordable Injuries or Illnesses or High Visibility Accidents, property damage equal to or greater than \$2,000, or any weight handling equipment accident involving a overturned crane, collapsed boom, or any other major damage to the crane or adjacent property. Information shall include contractor name; contract title; type of contract; name of activity, installation or location where accident occurred; date and time of accident; names of personnel injured; extent of property damage, if any; extent of injury, if known, and brief description of accident (to include type of construction equipment used, PPE used, etc.). Preserve the conditions and evidence on the accident site until the Government investigation team arrives on site and Government investigation is conducted.

1.13.3 Monthly Exposure Reports

Monthly exposure reporting to the Contracting Officer is required to be attached to the monthly billing request. This report is a compilation of employee-hours worked each month for all site workers, both prime and

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subcontractor. The Contracting Officer will provide copies of any special forms.

1.13.4 Regulatory Citations and Violations

Contact the Contracting Officer immediately of any OSHA or other regulatory agency inspection or visit, and provide the Contracting Officer with a copy of each citation, report, and contractor response. Correct violations and citations promptly and provide written corrective actions to the Contracting Officer.

1.13.5 Crane Reports

Submit crane inspection reports required in accordance with EM 385-1-1, Appendix H and as specified herein with Daily Reports of Inspections.

1.14 HOT WORK

Prior to performing "Hot Work" (welding, etc.) or operating other flame-producing devices, the Contractor will provide at least two (2) twenty (20) pound 4A:20 BC rated extinguishers for normal "Hot Work". All extinguishers shall be current inspection tagged, approved safety pin and tamper resistant seal. It is also mandatory to have a designated FIRE WATCH for any "Hot Work" done at this activity.

a. Oil painting materials (paint, brushes, empty paint cans, etc.), and all flammable liquids shall be removed from the facility at quitting time. All painting materials and flammable liquids shall be stored outside in a suitable metal locker or box and will require re-submittal with non-hazardous materials.

b. Accumulation of trays, paper, shavings, sawdust, boxes and other packing materials shall be removed from the facility at the close of each workday and such material disposed of in the proper containers located away from the facility.

c. The storage of combustible supplies shall be a safe distance from structures.

d. Area outside the facility undergoing work shall be cleaned of trash, paper, or other discarded combustibles at the close of each workday.

e. All portable electric devices (saws, sanders, compressors, extension chord, lights, etc.) shall be disconnected at the close of each workday. When possible, the main electric switch in the facility shall be deactivated.

f. When starting work in the facility, Contractors shall require their personnel to familiarize themselves with the location of the nearest fire alarm boxes and place in memory the emergency Fire Department phone number. ANY FIRE, NO MATTER HOW SMALL, SHALL BE REPORTED TO THE RESPONSIBLE FIRE DEPARTMENT IMMEDIATELY.

PART 2 PRODUCTS

2.1 FALL PROTECTION ANCHORAGE

Fall protection anchorage, conforming to ANSI Z359.1, will be left in place

and so identified for continued customer use.

PART 3 EXECUTION

3.1 CONSTRUCTION AND/OR OTHER WORK

The Contractor shall comply with EM 385-1-1, NFPA 241, the APP, the AHA, and other related submittals and activity fire and safety regulations.

3.1.1 Hazardous Material Use

Any work or storage involving hazardous chemicals or materials must be done in a manner that will not expose Government or Contractor employees to any unsafe or unhealthful conditions. Adequate protective measures must be taken to prevent Government or Contractor employees from being exposed to any hazardous condition that could result from the work or storage. The Prime Contractor shall keep a complete inventory of hazardous materials brought onto the work-site. Approval by the Contracting Officer of protective measures and storage area is required prior to the start of the work.

3.1.2 Hazardous Material Exclusions

Notwithstanding any other hazardous material used in this contract, radioactive materials or instruments capable of producing ionizing/non-ionizing radiation (with the exception of radioactive material and devices used in accordance with EM 385-1-1 such as nuclear density meters for compaction testing and laboratory equipment with radioactive sources) as well as materials which contain asbestos, mercury or polychlorinated biphenyls, di-isocyanates, lead-based paint are prohibited. The Contracting Officer, upon written request by the Contractor, may consider exceptions to the use of any of the above excluded materials.

3.1.3 Unforeseen Hazardous Material

If material, not indicated, that may be hazardous to human health upon disturbance during construction operations is encountered, stop that portion of work and notify the Contracting Officer immediately. Within 14 calendar days the Government will determine if the material is hazardous. If material is not hazardous or poses no danger, the Government will direct the Contractor to proceed without change. If material is hazardous and handling of the material is necessary to accomplish the work, the Government will issue a modification pursuant to "FAR 52.243-4, Changes" and "FAR 52.236-2, Differing Site Conditions".

3.2 PRE-OUTAGE COORDINATION MEETING

Contractors are required to apply for utility outages at least 15 days in advance. As a minimum, the request should include the location of the outage, utilities being affected, duration of outage and any necessary sketches. Once approved, and prior to beginning work on the utility system requiring shut down, the Contractor shall attend a pre-outage coordination meeting with the Contracting Officer to review the scope of work and the lock-out/tag-out procedures for worker protection. No work will be performed on energized electrical circuits unless proof is provided that no other means exist.

3.3 FALL HAZARD PROTECTION AND PREVENTION

The Contractor shall establish a fall protection and prevention program, for the protection of all employees exposed to fall hazards. The program shall include company policy, identify responsibilities, education and training requirements, fall hazard identification, prevention and control measures, inspection, storage, care and maintenance of fall protection equipment and rescue and escape procedures.

3.3.1 Training

The Contractor shall institute a fall protection training program. As part of the Fall Hazard Protection and Prevention Program, the Contractor shall provide training for each employee who might be exposed to fall hazards. Training requirements shall be in accordance with EM 385-1-1, section 21.A.16.

3.3.2 Fall Protection Equipment

The Contractor shall enforce use of the fall protection equipment designated for each specific work activity in the Fall Protection and Prevention Plan and/or AHA at all times when an employee is on a surface 1.8 m (6 feet) or more above lower levels. Fall protection systems such as guardrails, personnel fall arrest system, safety nets, etc., are required when working within 1.8m (6 feet) of any leading edge. In addition to the required fall protection systems, safety skiff, personal floatation devices, life rings etc., are required when working above or next to water in accordance with EM 385-1-1, paragraphs 05.I. and 05.J. Personal fall arrest systems are required when working from an articulating or extendible boom, swing stages, or suspended platform. In addition, personal fall arrest systems may be required when operating other equipment such as scissor lifts if the work platform is capable of being positioned outside the wheelbase. Fall protection must comply with 29 CFR 1926.500, Subpart M and EM 385-1-1.

3.3.2.1 Personal Fall Arrest Equipment

Personal fall arrest equipment, systems, subsystems, and components shall meet ANSI Z359.1. Only a full-body harness with a shock-absorbing lanyard or self-retracting lanyard is an acceptable personal fall arrest device. Body belts may only be used as a positioning device system (for uses such as steel reinforcing assembly and in addition to an approved fall arrest system). Harnesses shall have a fall arrest attachment affixed to the body support (usually a Dorsal D-ring) and specifically designated for attachment to the rest of the system. Only locking snap hooks and carabiners shall be used. Webbing, straps, and ropes shall be made of synthetic fiber. The maximum free fall distance when using fall arrest equipment shall not exceed 1.8 m (6 feet). The total fall distance shall always be taken into consideration when attaching a person to a fall arrest system.

3.3.3 Safety Nets

If safety nets are used as the selected fall protection system on the project, they shall be provided at unguarded workplaces, over water, machinery, dangerous operations and leading edge work. Safety nets shall be tested immediately after installation with a drop test of 181.4 kg (400 pounds) and every six months thereafter.

3.3.4 Existing Anchorage

Existing anchorages, to be used for attachment of personal fall arrest equipment, shall be certified (or re-certified) by a qualified person in accordance with ANSI Z359.1.

3.3.5 Horizontal Lifelines

Horizontal lifelines shall be designed, installed, certified and used under the supervision of a qualified person as part of a complete fall arrest system (29 CFR 1926.500).

3.4 EQUIPMENT

3.4.1 Material Handling Equipment

a. Material handling equipment such as forklifts shall not be modified with work platform attachments for supporting employees unless specifically delineated in the manufacturer's printed operating instructions.

b. The use of hooks on equipment for lifting of material must be in accordance with manufacturer's printed instructions.

c. Operators of forklifts or power industrial trucks shall be licensed in accordance with OSHA.

3.4.2 Weight Handling Equipment

a. The Contractor shall notify the Contracting Officer 15 days in advance of any cranes entering the activity so that necessary quality assurance spot checks can be coordinated. Contractor's operator shall remain with the crane during the spot check.

b. The Contractor shall comply with the crane manufacturer's specifications and limitations for erection and operation of cranes and hoists used in support of the work. Erection shall be performed under the supervision of a designated person (as defined in ASME B30.5). All testing shall be performed in accordance with the manufacturer's recommended procedures.

c. The Contractor shall comply with ASME B30.5 for mobile and locomotive cranes and ASME B30.22 for articulating boom cranes.

d. The presence of Government personnel does not relieve the Contractor of an obligation to comply with all applicable safety regulations. The Government will investigate all complaints of unsafe or unhealthful working conditions received in writing from contractor employees, federal civilian employees, or military personnel.

e. Each load shall be rigged/attached independently to the hook/master-link in such a fashion that the load cannot slide or otherwise become detached. Christmas-tree lifting (multiple rigged materials) is not allowed.

f. When operating in the vicinity of overhead transmission lines, operators and riggers shall be alert to this special hazard and shall follow the requirements of USACE EM 385-1-1 section 11 and ASME B30.5 or ASME B30.22 as applicable.

- g. Crane suspended personnel work platforms (baskets) shall not be used unless the Contractor proves that using any other access to the work location would provide a greater hazard to the workers or is impossible. Personnel shall not be lifted with a line hoist or friction crane.
- h. A fire extinguisher having a minimum rating of 10BC and a minimum nominal capacity of 5lb of extinguishing agent shall be available at all operator stations or crane cabs. Portable fire extinguishers shall be inspected, maintained, and recharged as specified in NFPA 10, Standard for Portable Fire Extinguishers.
- i. All employees shall be kept clear of loads about to be lifted and of suspended loads.
- j. A weight handling equipment operator shall not leave his position at the controls while a load is suspended.
- k. Only Contractor crane operators who have met the requirements of 29 CFR 1910.94, 29 CFR 1910.120, 29 CFR 1926.65, 29 CFR 1926.500, USACE EM 385-1-1, ASME B30.5, and ASME B30.22 and other local and state requirements shall be authorized to operate the crane.
- l. The Contractor shall use cribbing when performing lifts on outriggers.
- m. The crane hook/block must be positioned directly over the load. Side loading of the crane is prohibited.
- n. A physical barricade must be positioned to prevent personnel from entering the counterweight swing (tail swing) area of the crane.
- o. A substantial and durable rating chart containing legible letters and figures shall be provided with each crane and securely mounted onto the crane cab in a location allowing easy reading by the operator while seated in the control station.
- p. Certification records which include the date of inspection, signature of the person performing the inspection, and the serial number or other identifier of the crane that was inspected shall always be available for review by Contracting Officer personnel.
- q. Written reports listing the load test procedures used along with any repairs or alterations performed on the crane shall be available for review by Contracting Officer personnel.
- r. The Contractor shall certify that all crane operators have been trained in proper use of all safety devices (e.g. anti-two block devices).

3.4.3 Equipment and Mechanized Equipment

- a. Equipment shall be operated by designated qualified operators. Proof of qualifications shall be kept on the project site for review.
- b. Manufacture specifications or owner's manual for the equipment shall be on site and reviewed for additional safety precautions or requirements that are sometimes not identified by OSHA or USACE EM

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385-1-1. Such additional safety precautions or requirements shall be incorporated into the AHAs.

c. Equipment and mechanized equipment shall be inspected in accordance with manufacturer's recommendations for safe operation by a competent person prior to being placed into use.

d. Daily checks or tests shall be conducted and documented on equipment and mechanized equipment by designated competent persons.

3.5 ELECTRICAL

3.5.1 Portable Extension Cords

Portable extension cords shall be sized in accordance with manufacturer ratings for the tool to be powered and protected from damage. All damaged extension cords shall be immediately removed from service. Portable extension cords shall meet the requirements of NFPA 70.

3.6 HOUSEKEEPING

3.6.1 Clean-Up

All debris in work areas shall be cleaned up daily or more frequently if necessary. Construction debris may be temporarily located in an approved location, however garbage accumulation must be removed each day.

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WEEKLY SAFETY MEETING

CENAE

Date Held _____
Time _____

SUBJECT: CONTRACT NO. DACW33-99-C-00____ - WEEKLY SAFETY MEETING

CONTRACTOR _____

PERSONNEL PRESENT

| | Contr. | Sub. | Govt. |
|---------------------------|--------|------|-------|
| Date and Time Held: _____ | | | |
| Conducted By: _____ | | | |

All persons attending the meeting must sign the bottom or back of this form.

Subjects discussed (Note, delete, or add):

EM 385-1-1, Section: _____

Accident Prevention Plan _____ Individual Protective Equipment _____

Prevention of Falls _____ Back Injury/Safe Lifting Techniques _____

Fire Prevention _____ Sanitation, First Aid, Waste Disposal _____

Tripping Hazards _____ Clean-up - trash, nails in lumber _____

Staging, Ladders, Concrete Forms, Safety Nets _____

Hand Tools, Power Tools, Machinery, Chain Saws _____

Equipment Inspection & Maintenance (Zero Defects) _____

Hoisting Equipment, Winch and Crane Safety _____

Ropes, Hooks, Chains and Slings _____

Vehicle Operation Safety _____

Electrical Grounding, Temporary Wiring, GFCI _____

Lockouts/Safe clearance procedures
(electrical, pressure, moving parts) _____

Welding, Cutting _____ Excavation Hazard/Rescue _____

Loose Rock/Steep Slopes _____ Explosives _____

Water Safety _____ Boat Safety _____

HAZMAT, Toxic hazards, MSDS, respiratory, ventilation _____

Other Items of concern specific to this contract:

CQC Rep. Signature _____ CE Inspector _____

CF:

-- End of Section --

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SECTION 15001

WIRE ROPE

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- 3.1 DEMOLITION AND DISPOSAL OF EXISTING WIRE ROPES
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SECTION 15001

WIRE ROPE

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

ASTM INTERNATIONAL (ASTM)

| | |
|-------------------|--|
| ASTM A 148/A 148M | Standard Specification for Steel Castings, High Strength, for Structural Purposes |
|-------------------|--|

U.S. GENERAL SERVICES ADMINISTRATION (GSA)

| | |
|--------------|------------------------------|
| FS RR-W-410E | (Rev E) Wire Rope and Strand |
|--------------|------------------------------|

1.2 GENERAL REQUIREMENTS

1.2.1 Contractor Qualifications

All work performed on the hoisting system including cleaning, testing, disassembly and reassembly of existing equipment, and installation of new equipment, shall be performed by personnel with a minimum of three years experience in the installation of wire rope on heavy duty hoisting equipment.

1.2.2 Standard Products

Materials and equipment shall be the standard products of a manufacturer regularly engaged in the manufacture of the products and shall essentially duplicate items that have been in satisfactory use for at least 2 years prior to bid opening.

1.2.3 Verification of Dimensions and Responsibility for Errors

The Contractor shall be responsible for the correct installation of the wire ropes. The Contractor shall become familiar with details of the work, verify dimensions in the field, and shall advise the Contracting Officer of any discrepancy or any condition which could adversely affect the installation, before performing the work.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

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SD-01 Preconstruction Submittals

Work Plan; G, DO

Wire rope replacement plan, including a description of the disassembly of the existing wire ropes and the installation of the new wire ropes, with details of the method of fastening the new ropes to the hoist drums.

SD-03 Product Data

Wire Rope; G, DO

Manufacturer's information on wire rope, thimbles, and clamps, indicating compliance with specification requirements.

SD-07 Certificates

Certificate of Installation

Written certification that the wire ropes have been installed in accordance with manufacturer's recommendations.

1.4 DELIVERY AND STORAGE

Equipment and materials delivered and placed in storage shall be stored with protection from the weather, humidity and temperature variation, dirt and dust, or other contaminants.

1.5 CONTROL AND SEQUENCE OF WORK

See Section 01110 SUMMARY OF WORK, Subpart "Required Work Sequence", for work sequence and related requirements.

1.6 OPERATIONAL RESTRICTIONS

1.6.1 Notification

See Section 01110 SUMMARY OF WORK, Subpart "Required Work Sequence", for notification requirements.

1.6.2 Movement of Gates

Operation of flood control gates shall be coordinated with the Contracting Officer. The Contracting Officer's approval shall be obtained in advance for all gate movements and settings.

PART 2 PRODUCTS

2.1 WIRE ROPE

Wire rope shall be new, manufactured in the United States, and shall conform to FS RR-W-410E. Rope shall be constructed of preformed, extra improved plow steel (EIPS), drawn galvanized wire with an internal wire rope core. Rope shall be 1 inch diameter, 6x36 or 6x31 Warrington Seale construction (no filler wires), right regular lay, and shall have a minimum nominal breaking strength of 51.7 tons. Wire rope shall be thoroughly lubricated at the factory with a petroleum based lubricant containing a rust inhibitor.

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Rope for each hoist (a total of three) shall be one continuous piece approximately 1450 feet long. The Contractor is responsible for verifying the correct rope length for each hoist. Sufficient rope shall be installed so that when a gate is in the fully lowered position, there shall be two and a half wraps of rope around both ends of its associated hoist drum.

2.2 ACCESSORIES

Wire rope shall be attached to upper hoist drum as shown on Reference Drawing Ct-1-5370, Regulating Gate Hoist Drum and & Position Indicator Dial. The wire rope end terminations (sockets) shall develop 100% of the strength of the rope, and shall be cast from steel conforming to ASTM A 148/A 148M, Grade 105-85. Sockets shall be new. Existing sockets shall not be reused.

2.3 HOIST BRAKE ACTUATOR COMPONENTS

All replacement components for the hoist brake actuator of Gate Number 3 shall be new, and shall be designed for use on the existing Cutler Hammer Type TM size 10 spring set, electrically released brake. Existing undamaged components shall be reused.

PART 3 EXECUTION

3.1 DEMOLITION AND DISPOSAL OF EXISTING WIRE ROPES

Existing wire ropes to be replaced shall be removed by the Contractor and disposed of off the project site in accordance with Federal, State, and local requirements regarding disposal of such items.

3.2 ROPE INSTALLATION

New wire ropes shall be installed according to the manufacturer's recommendations. The Contractor shall retain an authorized representative of the rope manufacturer to inspect the new rope after it has been installed, and to verify in writing that the new rope has been properly installed and that no damage has occurred during installation. Ropes will also be inspected by a representative of the Contracting Officer during installation. Any rope found to be damaged prior to or during installation shall be replaced by the Contractor at his own expense.

3.3 HOIST BRAKE ACTUATOR REPAIRS

Prior to installation of the new cable on Gate No. 3, the Contractor shall inspect and repair the damage to the gate hoist brake actuator (see Section 01110 SUMMARY OF WORK, Subpart "Required Work Sequence"). Repairs shall include, but are not limited to, replacing the spring guide lower mounting bracket and associated parts, and repairing/replacing the actuator drive shaft. If during the inspection it is determined that additional work is required, an equitable adjustment shall be made in the contract price and duration. The repairs shall be performed by a technician experienced in the repair and adjustment of heavy duty hoisting equipment.

3.4 LIMIT SWITCH ADJUSTMENT AND OPERATIONAL TEST

After rope installation is completed on each gate, the gate shall be run through a complete up/down cycle in the presence of the Contracting Officer to demonstrate proper operation of the new rope and all controls and limit

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switches. The Contractor shall adjust limit switches and controls as required for proper hoist and gate operation. The slack limit idler gear assembly shall be inspected, cleaned, lubricated and adjusted as necessary to insure proper working order. Adjustment shall be performed by a technician experienced in repair and adjustment of heavy duty hoisting equipment.

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SECTION 15002

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SECTION 15002

ROLLER CHAIN

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM INTERNATIONAL (ASTM)

ASTM A 276 (2003) Stainless Steel Bars and Shapes

ASTM A 582/A 582M (1995b; R 2000e1) Free-Machining Stainless Steel Bars

1.2 GENERAL REQUIREMENTS

1.2.1 Contractor Qualifications

All work performed on the roller chain including manufacturing, assembly and installation shall be performed by personnel with a minimum of three years experience in the manufacture and assembly of machine equipment.

1.2.2 Standard Products

Materials and equipment shall be the standard products of a manufacturer regularly engaged in the manufacture of the products and shall essentially duplicate items that have been in satisfactory use for at least two years prior to bid opening

1.2.3 Verification of Dimensions and Responsibility for Errors

The Contractor shall be responsible for the correct installation of the roller chain. The Contractor shall become familiar with details of the work, verify dimensions in the field, and shall advise the Contracting Officer of any discrepancy or any condition which could adversely affect the installation, before performing the work.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Work Plan; G, DO

Roller chain replacement plan including a description of how the

chain shall be installed. Provide details on the steps involved in the installation process from chain arrival on site to final testing. Include any information on any special equipment required, for example rigging or lifting equipment.

SD-02 Shop Drawings

Roller Chain; G, DO

As-Built drawings of the roller chain shall be submitted for approval. Drawings shall provide details of each chain component including dimensions, materials used, and all relevant manufacturing and construction notes. Modifications and deviations from the contract drawings shall be denoted.

SD-03 Product Data

Retaining Rings; G, DO

Product data for the retaining rings shall be submitted for approval.

PART 2 PRODUCTS

2.1 ROLLER CHAIN

The rollers shall be constructed from Class 410 cond. H stainless steel conforming to ASTM A 276. The roller pins shall be constructed from Class 416 cond. T stainless steel conforming to ASTM A 582/A 582M. The chain links shall be constructed from Class 416 cond. A stainless steel conforming to ASTM A 582/A 582M. The links shall hold the rollers on centers and interconnect the system to form a smooth operating train in perfect alignment. Roller links shall be drilled and reamed in a jig to secure the same spacing of the trunnion holes in all links. All rollers shall be ground and polished to within the tolerances shown on Reference Drawing CT-1-5362 "Regulating Gate Guide and Roller Details", and shall be concentric with their trunnions

2.1.1 RETAINING RINGS

Retaining rings for the pins shall be Truarc No. 5160-87, or approved equal.

PART 3 EXECUTION

3.1 ROLLER CHAIN INSTALLATION

The roller chain shall be pre-assembled and ready for final installation prior to arrival on site. The Contractor shall install the chain according to the approved chain installation work plan. Once mounted the chain shall be adjusted to permit free movement for a calculated temperature of 35 degrees F.

3.2 Operational Test

After the chain has been installed and adjusted, the gate shall be operated through a minimum of one full open/close cycle. The Contractor and project personnel shall monitor the test to determine if further adjustments to the chain are required. If further adjustments are required, the test shall be repeated until the roller chain is operating satisfactorily.

REPAIRS TO SERVICE GATES, TOWNSHEND LAKE, VERMONT

-- End of Section --

TOWNSHEND LAKE DAM GATE HOIST WIRE ROPE REPLACEMENT

REFERENCE DRAWINGS

REFERENCE DRAWING 1

CT-1-5358 – GATES, HOISTS AND CRANES, GENERAL ARRANGEMENT

REFERENCE DRAWING 2

CT-1-5359 – REGULATING GATE ASSEMBLY AND DETAILS

REFERENCE DRAWING 3

CT-1-5362 – REGULATING GATE GUIDE AND ROLLER DETAILS

REFERENCE DRAWING 4

CT-1-5366 – REGULATING GATE HOIST GENERAL ARRANGEMENT

REFERENCE DRAWING 5

CT-1-5368 – REGULATING GATE HOIST IDLER SHEAVE

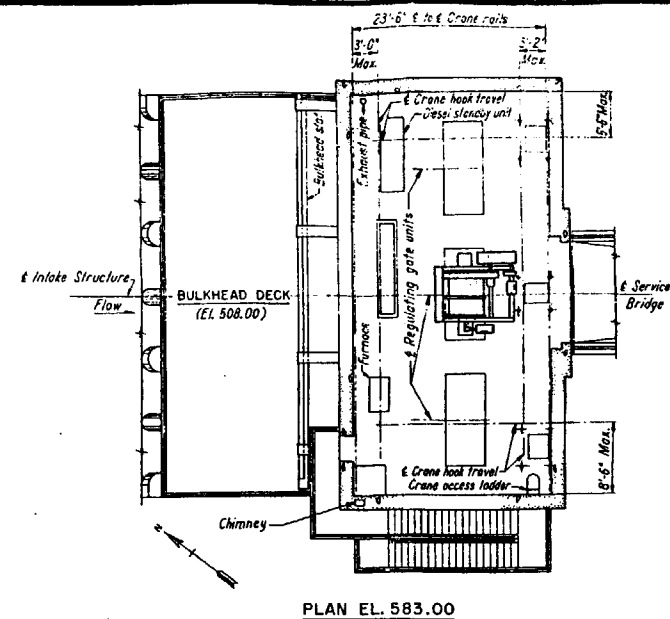
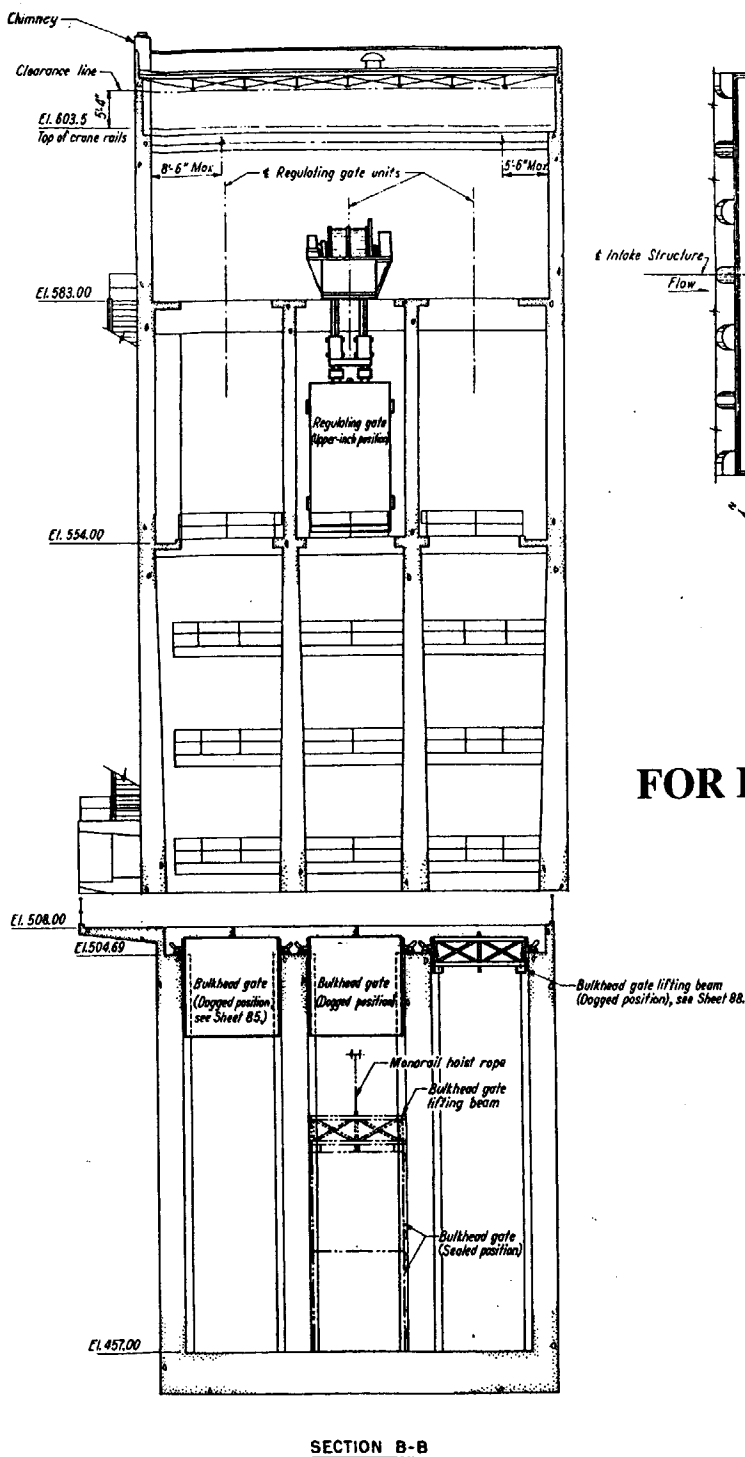
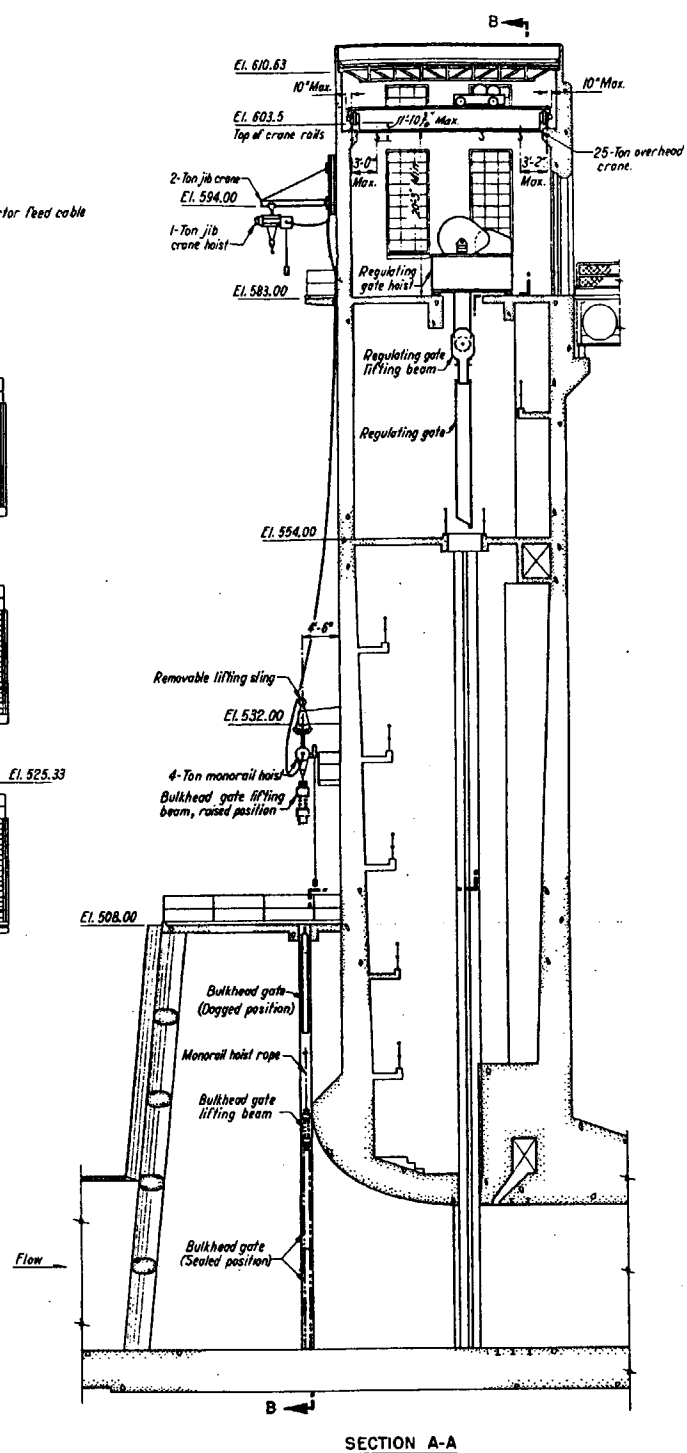
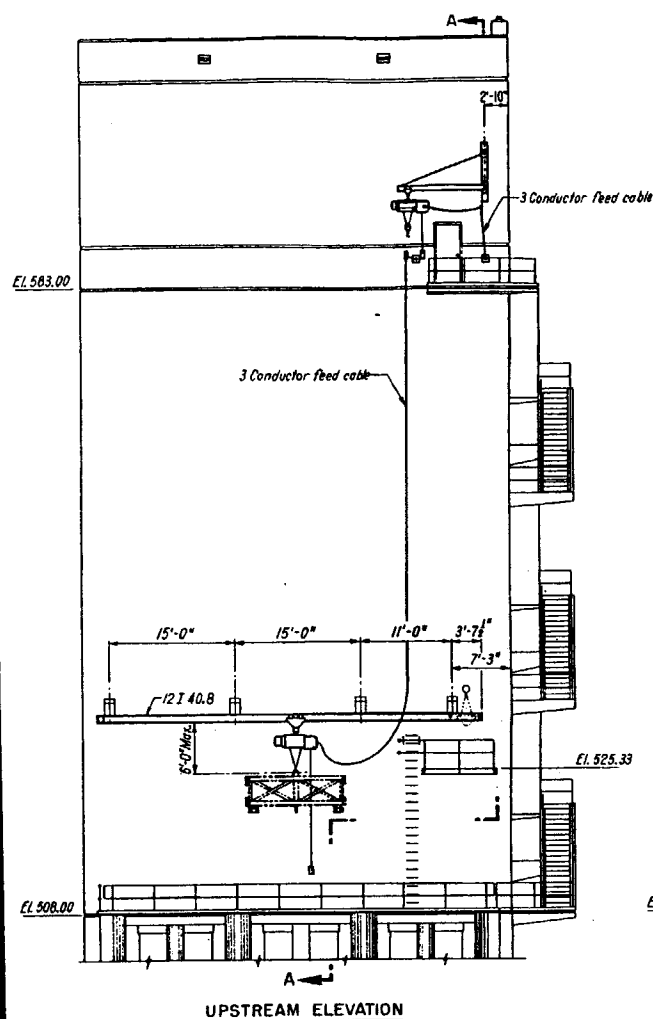
REFERENCE DRAWING 6

CT-1-5370 – REGULATING GATE HOIST DRUM & POSITION INDICATOR DIAL

REFERENCE DRAWING 7

CT-1-5373 – REGULATING GATE HOIST SLACK LIMIT SWITCH

MAY 2005



FOR INFORMATION ONLY
NOT TO SCALE

- NOTES
1. Bulkhead gates and bulkhead gate lifting beam are shown on this sheet in various locations to indicate function and operation method. The actual requirements are two bulkhead gates, one bulkhead gate lifting beam, three regulating gates, three regulating gate hoists, one overhead crane, one jib crane and hoist and one monorail hoist.
 2. The following will be paid for under items as shown:
 - Regulating gate hoists - Item No. 45.
 - Regulating gates - Item No. 46.
 - Overhead crane - Item No. 46.
 - Monorail hoist - Item No. 48.
 - Jib crane - Item No. 49.
 - Bulkhead gates - Item No. 47.
 - Bulkhead gate lifting beam - Item No. 47.

Record Drawing
Contract No. DA-19-016-CIVENG-59-103

PREPARED BY THE GARRISON DISTRICT FOR THE
U. S. ARMY ENGINEER DIVISION, NEW ENGLAND

| REVISION | DATE | DESCRIPTION | BY |
|----------|------|-------------|----|
| | | | |
| | | | |

U. S. ARMY ENGINEER DISTRICT, GARRISON
CORPS OF ENGINEERS
BETHLEHEM, N. H.

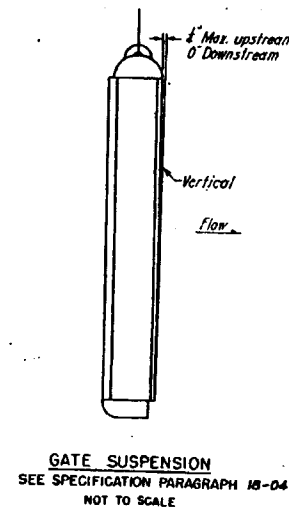
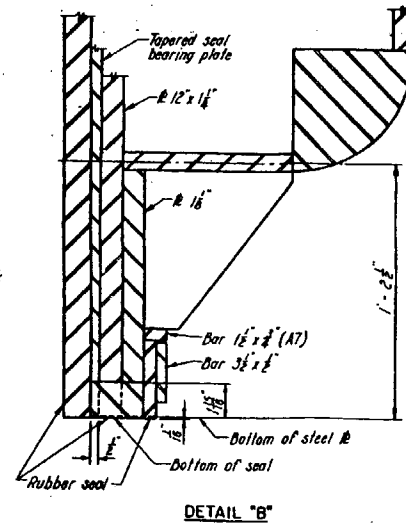
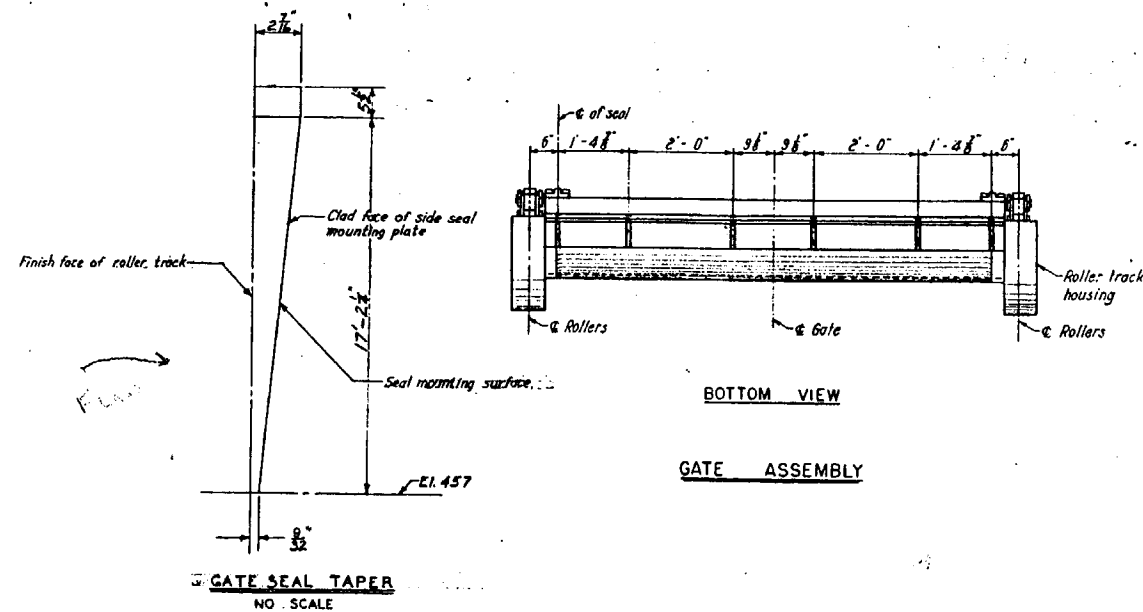
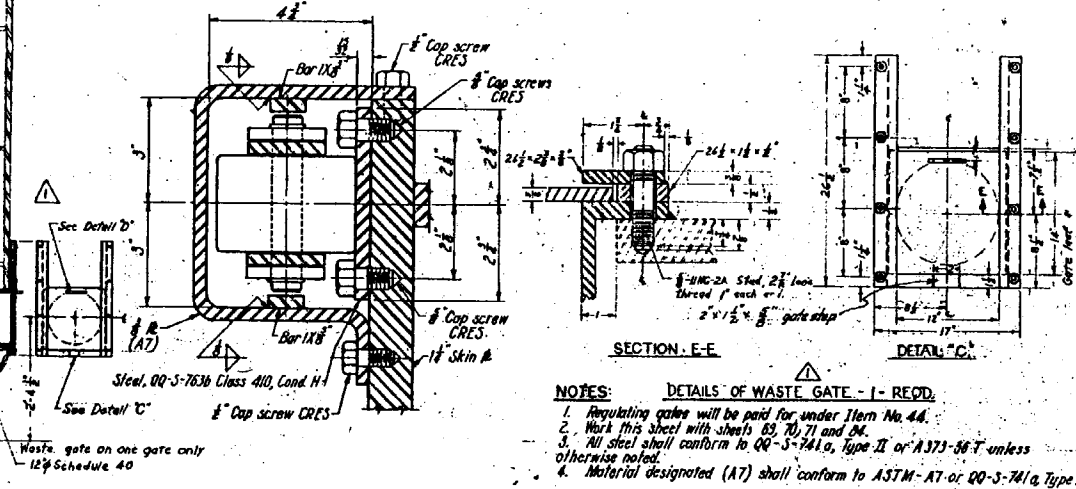
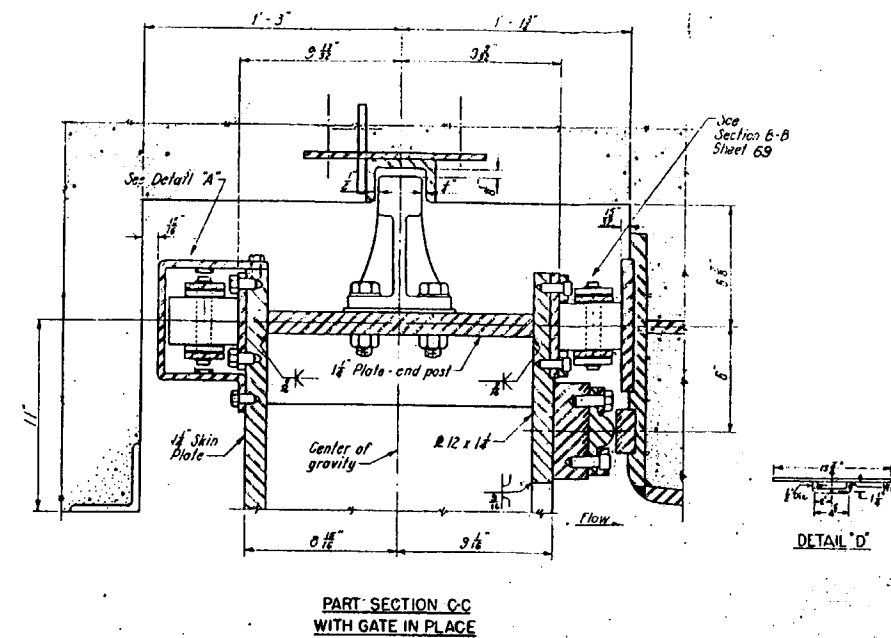
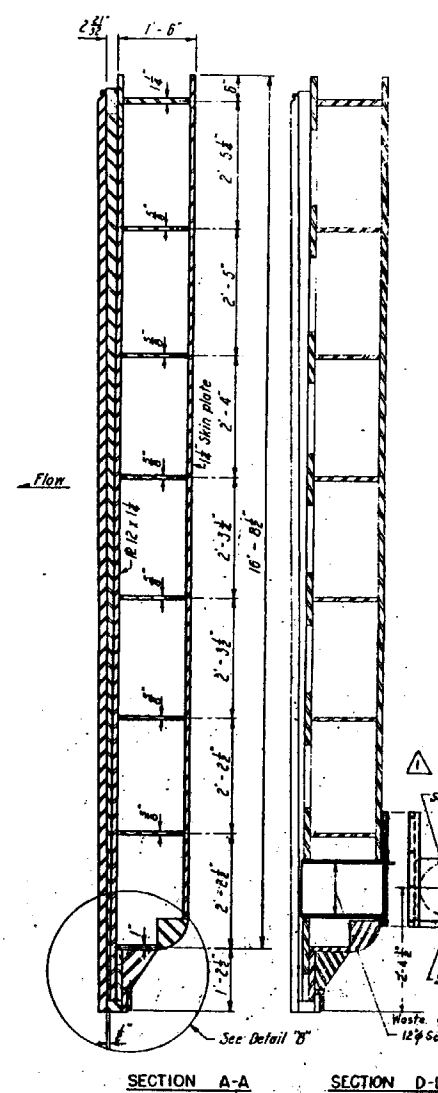
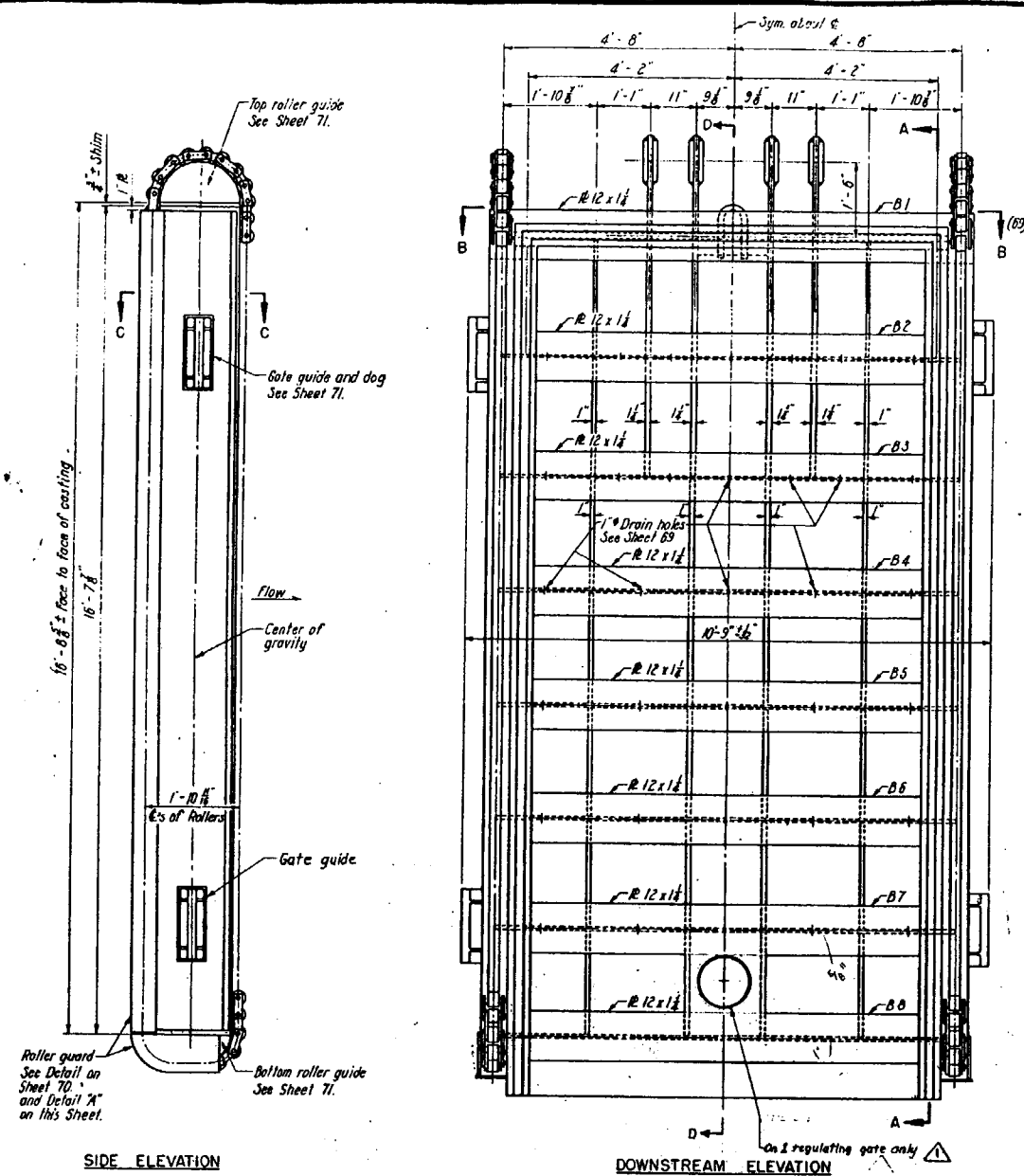
DESIGNED BY: *NVA* *REV* *DNB*
CHECKED BY: *W. J. [Signature]*
APPROVED BY: *W. J. [Signature]*
DISTRICT ENGINEER

CONNECTICUT RIVER FLOOD CONTROL
TOWNSHEND DAM
GATES, HOISTS & CRANES
GENERAL ARRANGEMENT
WEST RIVER, VERMONT

DATE: JULY 1958

SCALE: 1/8" = 1'-0" (SEE DRAWING 19-016-59-7)

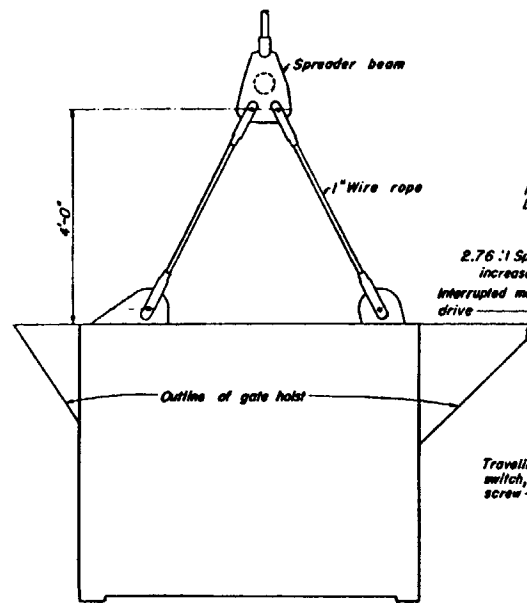
CT-1-5358
SHEET 67 OF 111



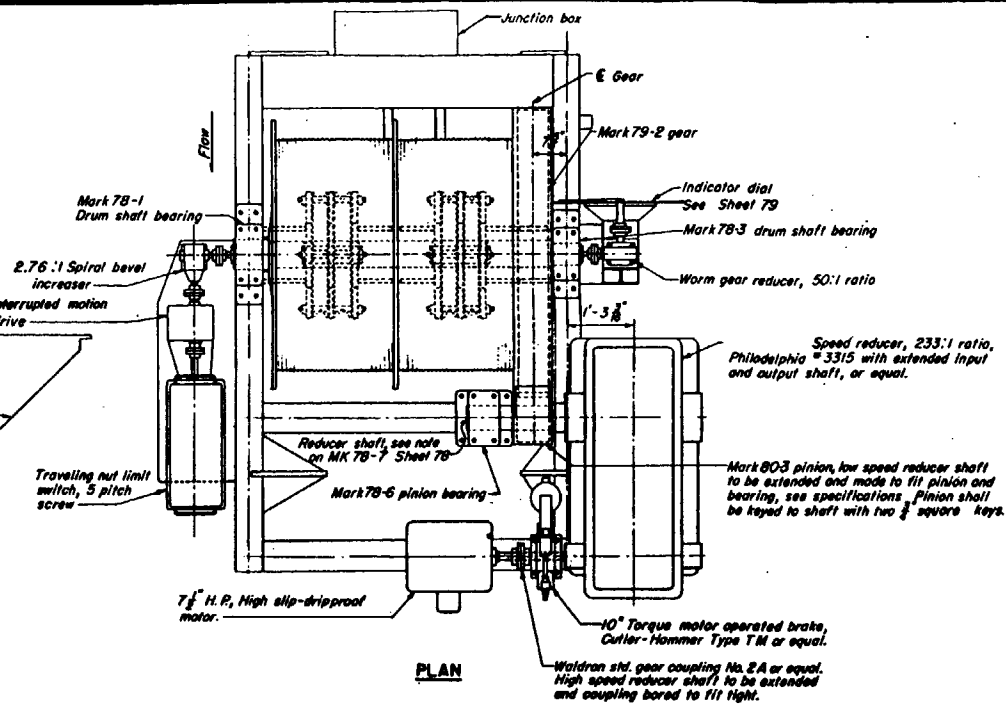
FOR INFORMATION ONLY
NOT TO SCALE

Record Drawing
Contract No. DA-19-016-CIV ENG 59-103

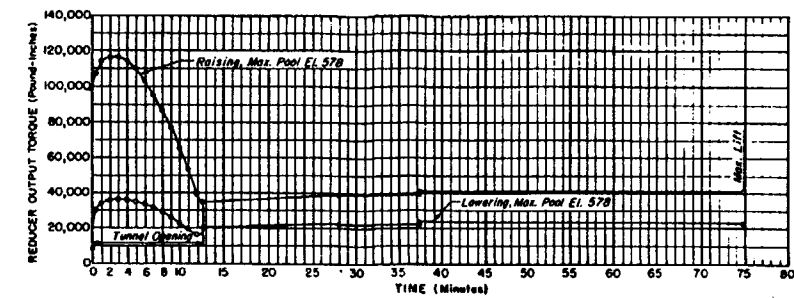
| | |
|---|-------------------|
| 7-26-58 Details of Waste Gate added (Add #1) <i>10/1/58</i> | |
| REVISION | DESCRIPTION |
| U. S. ARMY ENGINEER DISTRICT, GARRISON OFFICE OF ENGINEERS WASHINGTON, D. C. | |
| DES. BY D.N.B. | DR. BY R.G.N. |
| CH. BY M.V.H. | |
| CONNECTICUT RIVER FLOOD CONTROL TOWNSHEND DAM REGULATING GATE & ASSEMBLY & DETAILS | |
| WEST RIVER, VERMONT | |
| APPROVED <i>John F. Kane</i> CH. OF E. DISTRICT ENGINEER | DATE JULY 1958 |
| SCALE: AS SHOWN SPECIAL ORDER NO. 19-108-09-2 DRAWING NUMBER CT-1-5359 SHEET 68 OF 111 | |



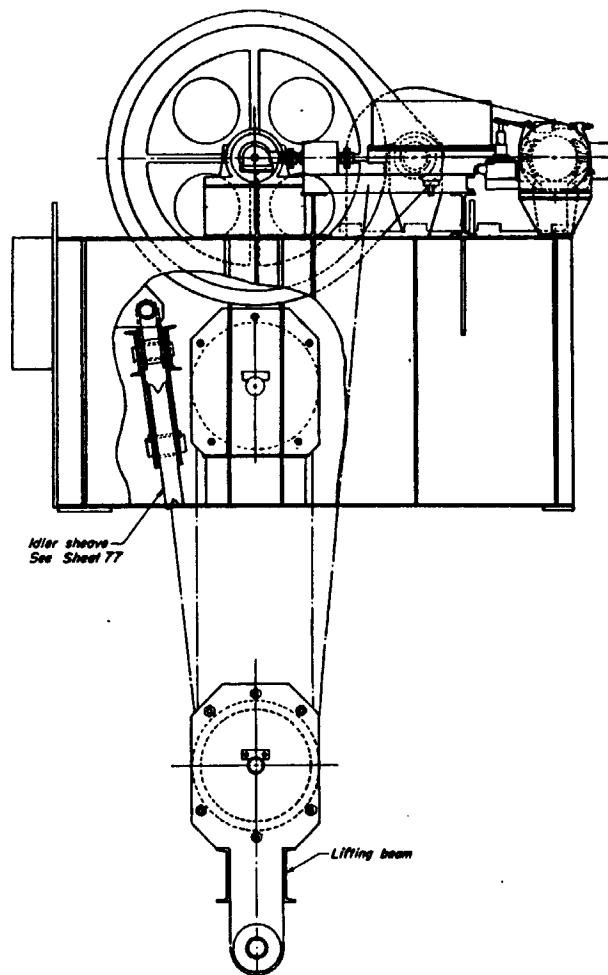
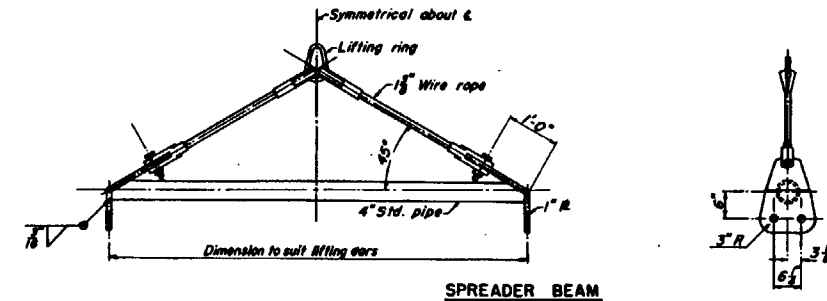
LIFTING DIAGRAM



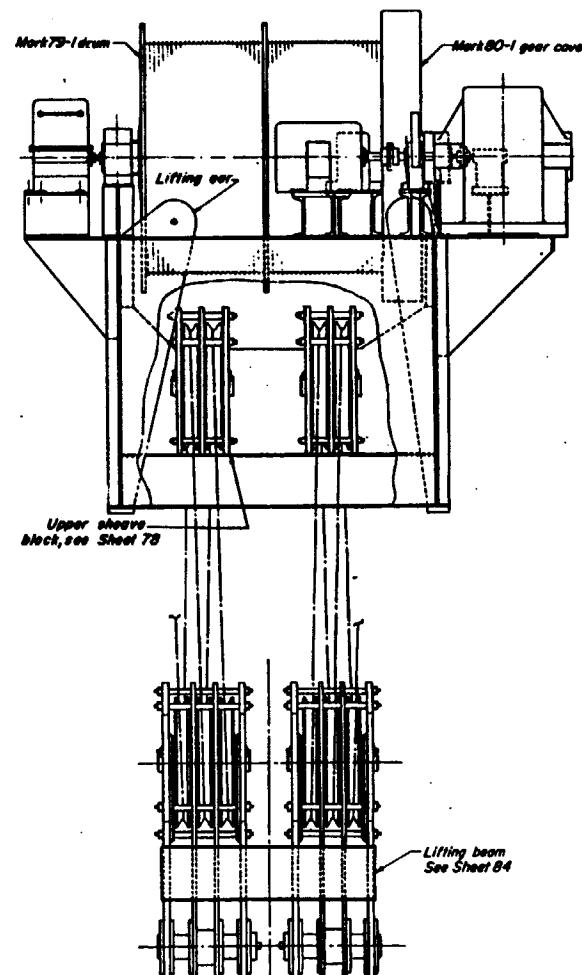
PLAN



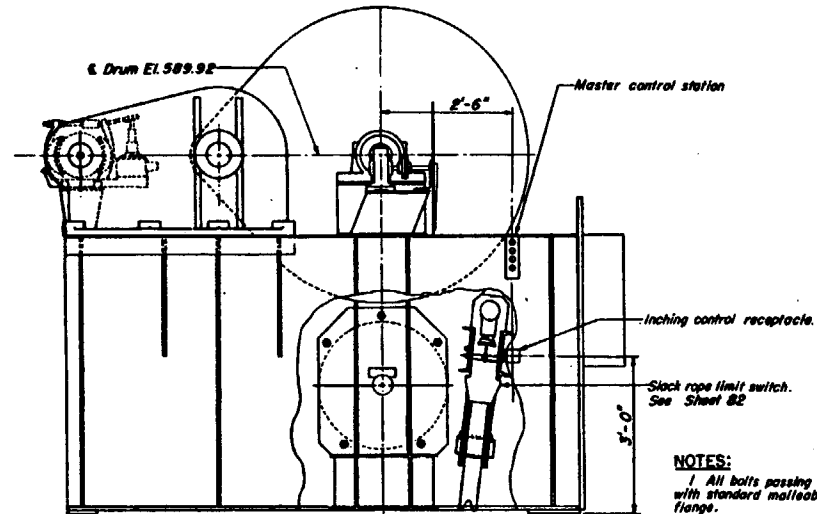
REGULATING GATE HOIST
REDUCER OUTPUT TORQUE
VS
TIME (Minutes)



LEFT ELEVATION



FRONT ELEVATION



RIGHT ELEVATION

NOTES:

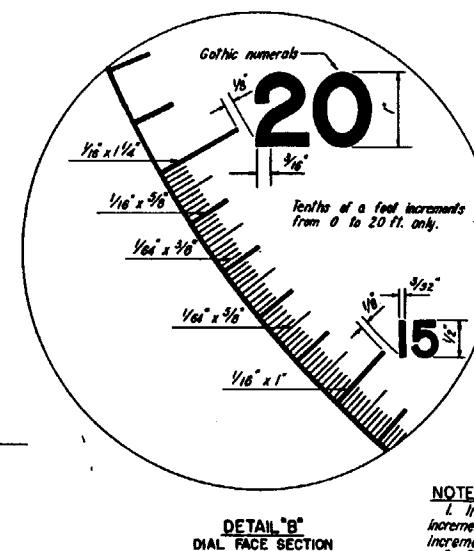
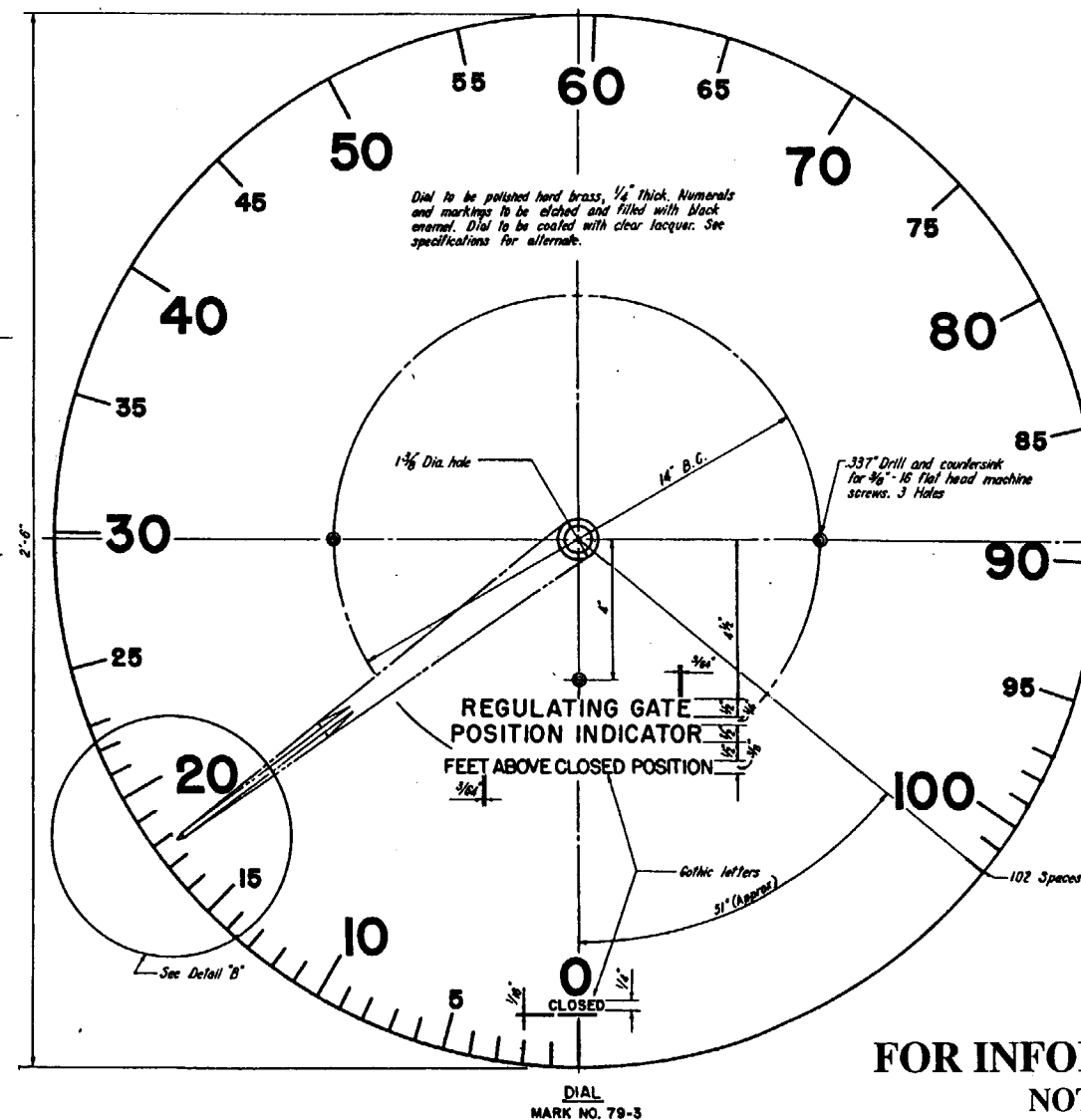
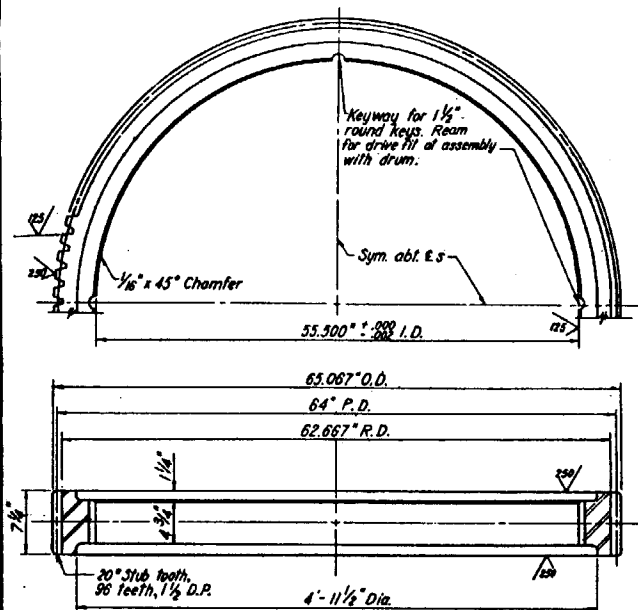
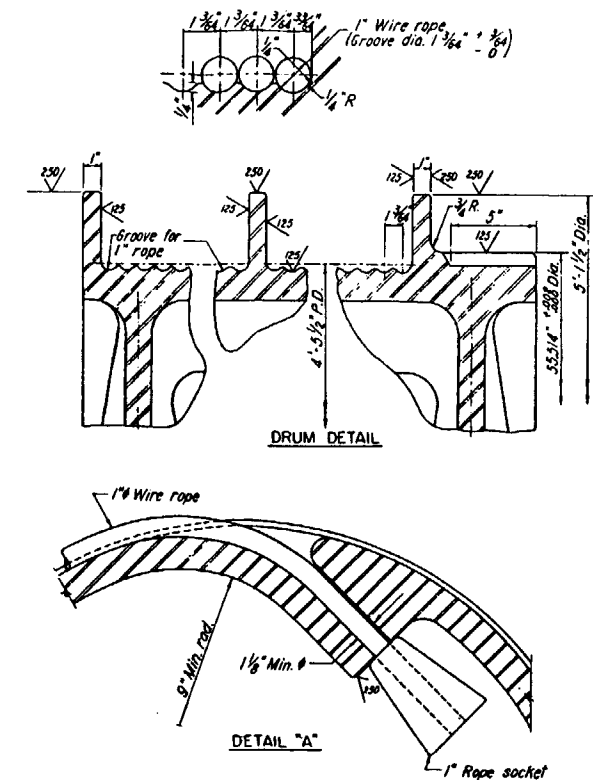
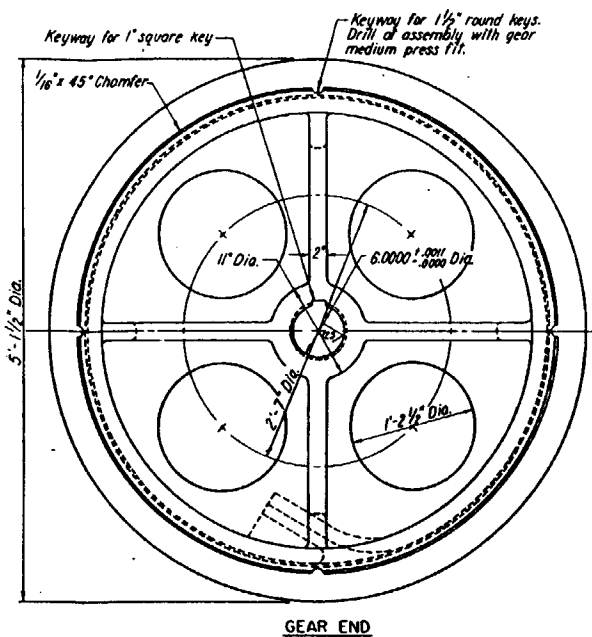
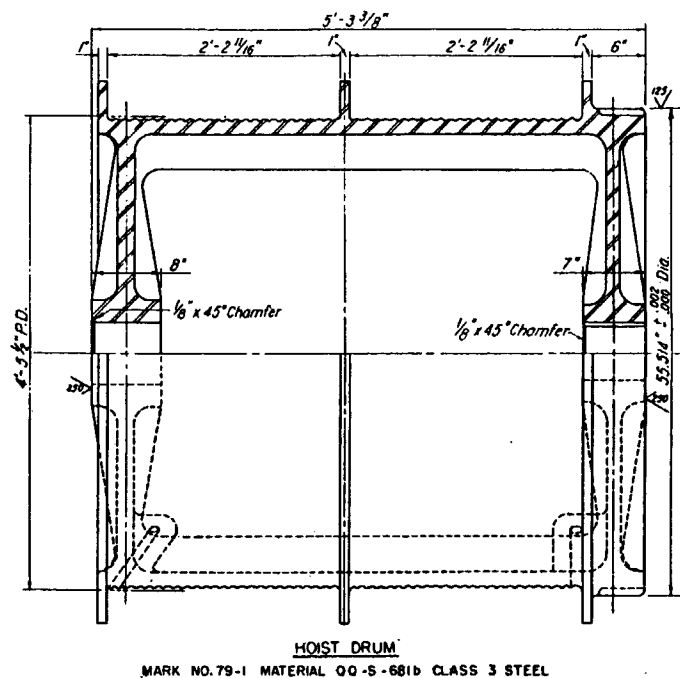
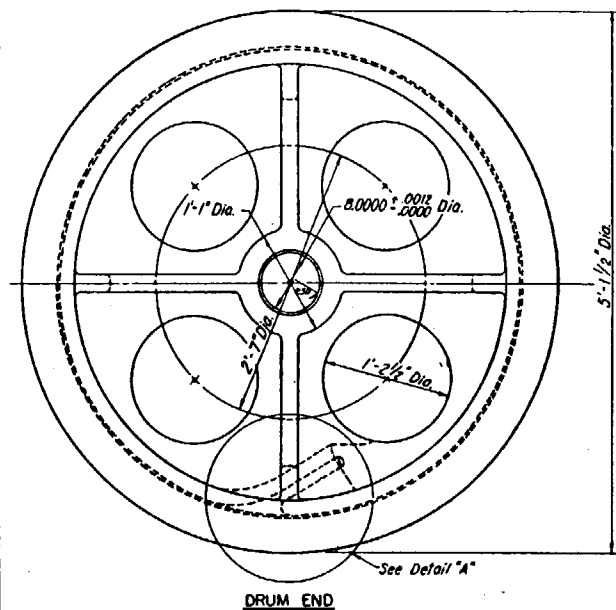
- All bolts passing thru beveled flanges of beams and channels to be furnished with standard malleable iron beveled washers. Beveled washers to be brazed to flange.
- Regulating gate hoist will be paid for under Item No. 45

FOR INFORMATION ONLY
NOT TO SCALE

Record Drawing
Contract No. DA 19-077 CIV Eng 59-103

PREPARED BY THE GARRISON DISTRICT FOR THE
U. S. ARMY ENGINEER DIVISION, NEW ENGLAND

| | | | | |
|---|--|------------------------------|-------------|----|
| REVISION | | DATE | DESCRIPTION | BY |
| U. S. ARMY ENGINEER DISTRICT, GARRISON CORPS OF ENGINEERS BURLINGTON, N. H. | | | | |
| CONNECTICUT RIVER FLOOD CONTROL | | | | |
| TOWNSHEND DAM | | | | |
| REGULATING GATE HOIST | | | | |
| GENERAL ARRANGEMENT | | | | |
| WEST RIVER, | | VERMONT | | |
| DATE | | JULY 1958 | | |
| SCALE 3/4" = 1'-0" | | SPEC. NO. CIV-ENG-19-00-22-7 | | |
| DRAWING NUMBER | | CT-1-5366 | | |
| SHEET 75 OF 111 | | | | |



NOTES

1. Indicator dial to be calibrated in the field for one foot increments except from 0 to 20 ft. to be in tenths of foot increments as shown.
2. Regulating gate hoists will be paid for under Item No. 45.
3. Drums to be provided with riser and filler strips.

3 Drums to be provided with riser and filler strips.

3 Drums to be provided with riser and filler strips.

Record Drawing
Contract No. DA-19-016-CIV ENG 59-103

Contract No. DA-19-016-CIV ENG. 59-103

| | | | | | | | | | |
|-----------------|--|--|--|--|--|--------------------|--|--|--|
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| | | | | | | | | | |
| ISSUANCE | | | | | | DESCRIPTION | | | |
| | | | | | | BY | | | |

**U. S. ARMY ENGINEER DISTRICT, GARRISON
CORPS OF ENGINEERS
RIVERSIDE, N. H.**

DES. BY
NVAH

DWG. NO.
RCH DNB

DATE
7-8-58

APPROVED BY
[Signature]
ED. Williams
DISTRICT ENGINEER

CHECKED BY
[Signature]
J. P. Mitchell
CLERY ENGINEERING INC.

CONNECTICUT RIVER FLOOD CONTROL TOWNSHEND DAM

REGULATING GATE MOIST
DRUM & POSITION INDICATOR DIAL

WEST RIVER, VERMONT

APPROVED
[Signature]
COL. C. O. E.

DATE
JULY 1958

SCALE: AS SHOWN SPEC. NO. CIV. ENL.-10-00-01 DRAWING NUMBER CT-I-5370

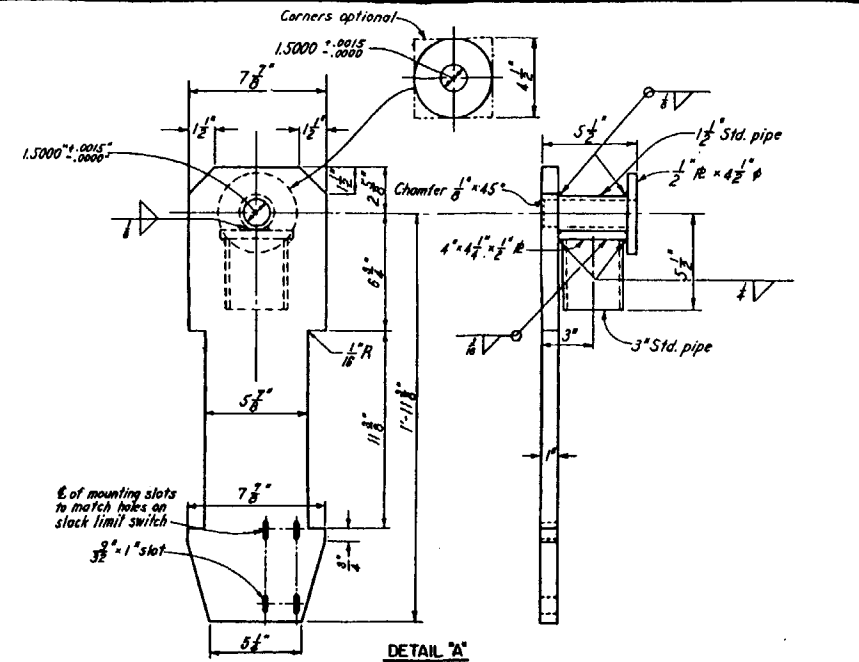
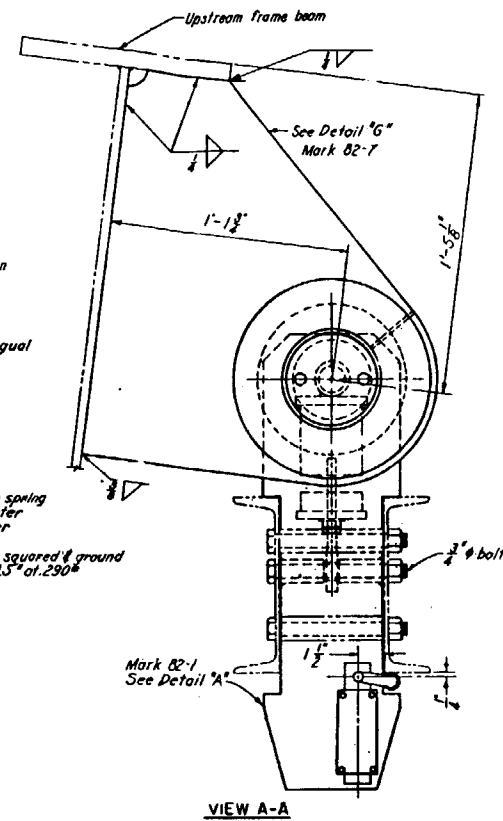
SHEET 73 OF 111

FOR INFORMATION ONLY
NOT TO SCALE

PREPARED BY THE GARRISON DISTRICT FOR THE
U.S. ARMY ENGINEER DIVISION, NEW ENGLAND

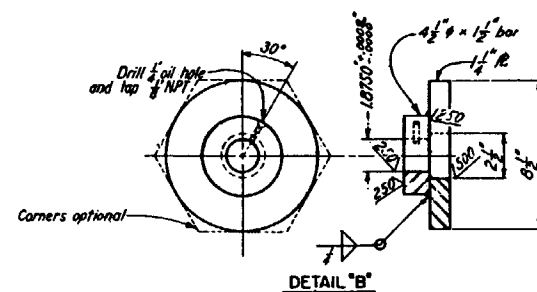
U.S. ARMY ENGINEER DIVISION, NEW ENGLAND

Drum & Ratchet Indicator

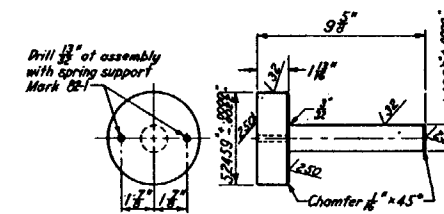


ASSEMBLY

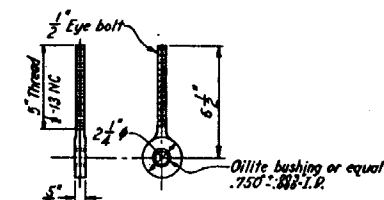
SLACK LIMIT SWITCH



MARK NO. 82-4
MATERIAL-STRUCTURAL STEEL



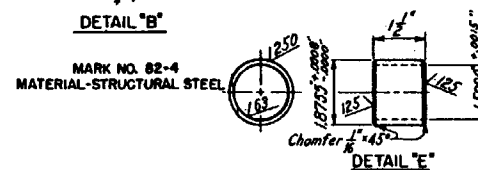
MARK NO. 82-2 MATERIAL - F.S. 1045 STEEL



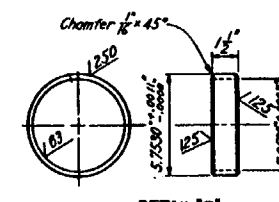
MARK NO. 82-3

NOTES

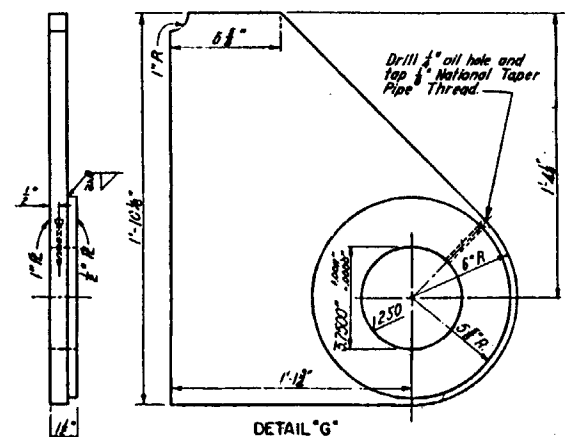
1. Allow free movement between all moving parts.
2. Regulating gate hoists will be paid for under Item No. 45
3. Structural steel shall conform to Fed. Spec. QQ-S-741a, Type II or ASTM A373-56T.



MARK NO. 82-5
MATERIAL - OILITE BRONZE OR EQUAL



MARK NO. 82-F.
MATERIAL - OILITE BRONZE OR EQUAL

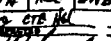




MARK NO. 82-7 DETAIL "G" MATERIAL-STRUCTURAL STEEL

FOR INFORMATION ONLY
NOT TO SCALE

Record Drawing

Contract No. DA-19-016-CIV ENG 59-103

| | | | | | |
|---|---------------|----------------|--|--|----|
| | | | | | |
| | | | | | |
| | | | | | |
| REVISION | DATE | DESCRIPTION | | | BY |
| <p>U. S. ARMY ENGINEER DISTRICT, GARRISON CORPS OF ENGINEERS RIVERDALE, N. D.</p> | | | | | |
| DES. BY HVM RCE | DR. OF RCE | CHK. BY BWB | | | |
| <p>200 CTS MC  H. V. McCall CIVIL ENGINEER 200 CTS MC  H. V. McCall CIVIL ENGINEER</p> | | | <p>CONNECTICUT RIVER FLOOD CONTROL TOWNSHEND DAM REGULATING GATE HOIST SLACK LIMIT SWITCH</p> | | |
| WEST RIVER, | | | VERMONT | | |
| <p>APPROVED  E. C. Wolfe DISTRICT ENGINEER</p> | | | <p>DATE JULY 1958</p> | | |
| <p>SCALE: AS SHOWN SPEC. NO. CTS-ENG-10-00-01 DRAWING NUMBER CT-1-5573 SHEET 82 OF 111</p> | | | | | |

PREPARED BY THE GARRISON DISTRICT FOR THE
U. S. ARMY ENGINEER DIVISION, NEW ENGLAND